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U. S. DEPARTMENT OF THE INTERIOR
PROTOTYPE OIL SHALE LEASING PROGRAM

OIL SHALE TRACT C-b
ENVIRONMENTAL MONITORING REPORT
(June 1984 through November 1984)

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Submitted to:

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By:

CATHEDRAL BLUFFS SHALE OIL COMPANY

TENNECO SHALE OIL COMPANY
OCCIDENTAL OIL SHALE, INC.

January 31, 1985

INTRODUCTION

Regular environmental reporting for Oil Shale Tract C-b during the interim monitoring period consists of six-month data reports submitted February 15, 1983, July 15, 1983, January 15, 1984, July 15, 1984 and January 31, 1985. Limited data analyses are included in the February 15, 1983 and January 15, 1984 reports.

The Interim Monitoring Program was initiated in March 1982. The data reported here fulfill the environmental monitoring requirements specified for the interim monitoring period by the OSP0. Data are reported for the period of June 1984 to November 1984. Any errors found in previously reported data appear in the Data Corrections section.

Data not previously reported for dates prior to this report period are presented in the Supplemental Data Sections for meteorology, air quality, hydrology and lab analyses.

Each volume contains the following:

Volume I	Tract Photography, Hydrology and Water Quality
Volume II	Air Quality and Meteorology, Noise
Volume III	Biology, Miscellaneous Minor Programs

INTRODUCTION

Regular environmental monitoring for the State of New York during the interim monitoring period consists of six-month data reports submitted February 15, 1981, July 15, 1981, January 15, 1982, July 15, 1982, and January 15, 1983. Limited data analyses are included in the February 15, 1983 and January 15, 1984 reports.

The Interim Monitoring Program was initiated in March 1982. The data reported here fulfill the environmental monitoring requirements specified for the interim monitoring period of the OPRD. Data are reported for the period of June 1981 to November 1982. Any errors found in previously reported data appear in the Data Corrections section.

Data not previously reported for dates prior to this report period are presented in the Supplemental Data Section for meteorology, air quality, hydrology and fish analysis.

Each volume contains the following:

- Volume I: Project Protocol, Hydrology and Water Quality
- Volume II: Air Quality and Water Quality
- Volume III: Biology, Microbiology, and Fish Analysis

Volume I: Project Protocol, Hydrology and Water Quality
Volume II: Air Quality and Water Quality
Volume III: Biology, Microbiology, and Fish Analysis

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THE YOUNG MAN

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1.0 Environmental Monitoring Program

The Development Monitoring Program was discontinued in March 1982 and replaced with an Interim Monitoring Program during a period of reduced site activity at the C-b Tract. Each section will specify changes made to the monitoring program.

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1.1 Tract Photography

Surface and aerial photography programs were discontinued during the interim monitoring period. They will be reinitiated when Tract activities start up.

1. The following

2. The following

1.2 Hydrology and Water Quality

To assist in interpretation of hydrologic and water quality data, the reader must understand that two items in particular may affect monitoring program results: intentional flooding of the V/E shaft and water management practices. The V/E shaft was allowed to flood in September 1981; water levels have reached the equilibrium level shown in Figure 1.2.1.6-1. Direct discharge from Ponds A/B into Piceance Creek via East No Name Gulch was utilized to dispose of excess mine water from the Production and Service Shafts.

Hydrologic and water quality monitoring frequency and laboratory analysis requirements vary by type and location of sample collection station. The requirements from government agencies also vary regarding purpose of monitoring. Tract C-b monitoring requirements have been derived from the following documents:

- IMP - Interim Monitoring Program prepared for the Oil Shale Project Office (OSPO).
- WAP - Water Augmentation Plan prepared for the State of Colorado Water Court, Division 5.
- NPDES - National Pollutant Discharge Elimination System (NPDES) monthly report prepared for the State of Colorado Water Quality Control Division.

Hydrologic data for surface streams through September 1984 are presented in Section 1.2.1.1; associated water quality appears in Section 1.2.2.1.

Hydrologic data for springs and seeps through November 1984 appear in Section 1.2.1.2; associated water quality appears in Section 1.2.2.2.

Hydrologic data for alluvial and bedrock wells from June 1984 through November 1984 appear in Sections 1.2.1.3 and 1.2.1.4 respectively; water quality data appear in Sections 1.2.2.3 and 1.2.2.4 respectively.

As a matter of convenience, field measurements of temperature, pH and specific conductance are tabulated for springs and seeps in Section 1.2.1 along with flows or levels data. Also as a convenience, summary Table 1.2-1 contains water monitoring requirements by station designation including sample frequencies of levels or flows and water quality. This table replaced Exhibit B, which displayed monitoring requirements for the WAP during development on C-b Tract. Within each sub-section of Water Quality Section 1.2.2, the required frequency is explained and parameters listed for analyses during the Interim Monitoring Program (IMP). For convenience, Table 1.2-2 lists an index of deep wells sampled in and around C-b Tract with associated page numbers locating levels data, time series plots of levels, and water quality for each well by aquifer or zone and location.

Exhibit A (map) presented in jacket Figure 1.2-1 provides location of off-tract sampling sites. Maps are included in each sub-section for locating on-or near-Tract sampling sites. Station coordinates and four digit computer codes for collection stations sampled periodically since baseline are presented in Section 3.0, Data Automation.

Although not required under the WAP, five Mobil wells are being monitored by Mobil with data being provided to CB. Mobil wells are designated 1, 2, 3, 12 and 13 with associated computer codes MW01 - MW03, MW12 and MW13. Locations are shown on Figure 1.2-2; data appear in Section 1.2.1.8.

1.2 Hydrology and Water Quality

To assist in interpretation of hydrologic and water quality data, the reader must understand that two items in particular may affect monitoring program results: (1) potential flooding of the V/E shaft and water management practices. The V/E shaft was allowed to flood in November 1981 water levels have reached the aquifer level shown in Figure 1.2.1.1. (2) recent discharge from Bond A/E into Pecos Creek via East No Name Gulch was utilized to dispose of excess mine water from the production and service shafts.

Hydrologic and water quality monitoring frequency and laboratory analysis requirements vary by type and location of sample collection station. The requirements from government agencies also vary regarding purpose of monitoring. Table 1.2.1.1 monitoring requirements have been derived from the following documents:

1.2.1.1.1 - Interim Monitoring Program prepared for the Oil Shale Project Office (1980).

1.2.1.1.2 - Water Management Plan prepared for the State of Colorado Water Court, Division 2.

1.2.1.1.3 - National Pollutant Discharge Elimination System (NPDES) monthly reports prepared for the State of Colorado Water Quality Control Division.

1.2.1.1.4 - Hydrologic data for surface streams through September 1984 are presented in Section 1.2.1.1.4. Associated water quality reports in Section 1.2.1.1.4.

1.2.1.1.5 - Hydrologic data for surface and mine through November 1984 appear in Section 1.2.1.1.5. Associated water quality reports in Section 1.2.1.1.5.

1.2.1.1.6 - Hydrologic data for alluvial and bedrock wells from June 1984 through November 1984 appear in Section 1.2.1.1.6 and 1.2.1.1.7 respectively. Water quality data appear in Sections 1.2.1.1.6 and 1.2.1.1.7 respectively.

As a matter of convenience, field measurements of temperature, pH and specific conductance are tabulated for alluvial and bedrock wells in Section 1.2.1.1.6 and 1.2.1.1.7 respectively. Also as a convenience, summary Table 1.2.1.1.1 lists monitoring components by station location including sample frequencies, levels or times and water quality. This table replaced Exhibit B, which displays monitoring requirements for the WAP during development of C-E tract. Within each sub-section of water quality Section 1.2.1.1, the required frequency is explained and parameters listed for analysis during the Interim Monitoring Program (IMP). For convenience, Table 1.2.1.1.1 lists an index of deep wells sampled in and around C-E tract with associated data numbers, located levels data, time series plots of levels and water quality for each well by aquifer or zone and location.

Exhibit A (map) presented in Section 1.2.1.1 provides location of off-shaft sampling sites. Maps are included in each sub-section for location of off-shaft sampling sites. Station coordinates and four digit corner codes for collection stations sampled periodically since baseline are presented in Section 1.2.1.1.2 data automation.

Although not required under the WAP, five Mobil wells are being monitored by Mobil with data being provided to CE. Mobil wells are designated 1.2.1.1.8 and 1.2.1.1.9 with associated computer codes MW01, MW02 and MW03. Locations are shown in Figure 1.2.1.1.8 data appear in Section 1.2.1.1.8.

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TABLE 1.2-1
Interim Monitoring Program
Water Monitoring Requirements by Designation
Observation Wells

Page 1 of 3

Computer Code	Designation	Owner of Well	Formation	-----Frequency----- Levels	Water Quality	Measured By
WA01	A-1	TOSCO	Alluvium	M	S/F	A
WA02	A-2	TOSCO	"	M	S/F	A
WA03	A-3	CB	"	M	S/F	A
WA04	A-4	CB	"	Dry	S/F	A
WA05	A-5	CB	"	M	S/F	A
WA55	A-5A	CB	"	M	S/F	A
WA56	A-5B	CB	"	M	S/F	A
WA06	A-6	TOSCO	"	M	S/F	A
WA07	A-7	CB	"	M	S/F	A
WA08	A-8	TOSCO	"	M	S/F	A
WA09	A-9	CB	"	M	S/F	A
WA10	A-10	CB	"	Dry	S/F	A
WA11	A-11	CB	"	M	S/F	A
WA12	A-12	CB	"	M	S/F	A
WA13	A-13	CB	"	Dry	S/F	A
WB03	B-102-3-2	CB	Uinta	S	-	A
WC03	B-102-3-1	CB	Uinta	S	-	A
WD02	CB-2	CB	UPC1/UINTA (COMPOSITE)	M	-	A
WE03	CB-3	CB	UPC2	M	-	A
WE04	CB-4	CB	UPC2	M	-	A
WG12	SG-1-1	CB	LPC3	C	S1	A
WD12	SG-1-2	CB	UPC1	C	S1	A
WE11	SG-1A-1	CB	UPC2	S	-	A
WD11	SG-1A-2	CB	UPC1	S	-	A
WE61	SG-6-1	CB	UPC2	M	-	A
WG61	SG-6-2	CB	LPC3	M	-	A
WD61	SG-6-3	CB	UPC1	M	-	A
WY81	SG-8R	CB	Lower Aquifer	M	S1	A
WG91	SG-9-1	CB	LPC3	B	-	A
WE91	SG-9-2	CB	UPC2	B	-	A
WD91	SG-9-3	CB	UPC1	B	-	A
WC91	SG-9-4	CB	Uinta	B	-	A
WG51	SG-10A-1	CB	LPC3	M	-	A
WE51	SG-10A-2	CB	UPC2	M	-	A
WD51	SG-10A-A	CB	UPC1/CON.UINTA	M	-	A
WD90	SG-10	CB	UN.UINTA	C	Q1	A
WG52	SG-11-1	CB	LPC3	M	-	A
WE52	SG-11-2	CB	UPC2	M	-	A
WD52	SG-11-3	CB	UPC1	M	-	A
WG17	SG-17-1	CB	LPC3	B	-	A
WE17	SG-17-2	CB	UPC2	B	-	A
WD17	SG-17-3	CB	UPC1	B	-	A
WC17	SG-17-4	CB	Uinta	B	-	A
WD57	SG-17A	CB	UPC1	B	S1	A
WG18	SG-18A-1	CB	LPC3	O	-	A
WE18	SG-18A-2	CB	UPC2	O	-	A
WD18	SG-18A-3	CB	UPC1	O	-	A
WD19	SG-19	CB	UPC1	M	-	A
WG20	SG-20-1	TOSCO	LPC3	BAD COMPLETION	-	A
WE20	SG-20-2	TOSCO	UPC2	M	S1	A
WD20	SG-20-3	TOSCO	UPC1	M	S1	A
WH21	SG-21-1	CB	LPC4	M	-	A
WG21	SG-21-2	CB	LPC3	M	-	A
WE21	SG-21-3	CB	UPC2	M	-	A
WD21	SG-21-4	CB	UPC1	M	-	A
WY44	AT-1	CB	LOWER AQUIFER	C	-	A
WV37	AT-1A	CB	COMPOSITE	M	-	A
WX38	AT-1A-1	CB	UPPER AQUIFER	M	-	A
WY45	AT-1C-1	CB	LOWER AQUIFER	W	Q	A
WY46	AT-1C-2	CB	LOWER AQUIFER	W	-	A
WX44	AT-1C-3	CB	UPPER AQUIFER	C	Q	-
WG41	AT-1D-1	CB	LPC3	B	-	A
WE41	AT-1D-2	CB	UPC2	B	-	A
WD41	AT-1D-3	CB	UPC1	B	-	A
WD14	14X-7-1	CB	UPC1	M	-	A
WD15	14X-7-2	CB	UPC1	B	-	A
W119	22X-17	CB	UPC2 & LPC3	M	-	A
W117	24X-17	CB	UPC2 & LPC3	M	-	A
WG23	21X12-1	CB	LPC3	M	-	A
WC23	21X12-2	CB	UN.UINTA	M	-	A
WD22	22X1-2	CB	UPC1	M	-	A
WC22	22X1-3	CB	UN.UINTA	M	-	A

Computer Code	Designation	Owner of Well	Formation	Frequency Levels	Water Quality	Measured By
WG43	43X2-1	CB	LPC3	M	-	A
WE43	43X2-2	CB	UPC2	M	-	A
WW22	31X-12	CB	UN. UINTA	W	M ₁ /S	A
WX32	32X-12	CB	UPC2	C	S ₁	A
WW32	32Y-12	CB	UN. UINTA	M	O ₁	A
WW13	41X-13	CB	UN. UINTA	W	M ₁ /S	A
WV10	TG-71-1	CB	COMPOSITE	O	-	A
WX75	TH-5**	US	UPPER AQUIFER	O	-	A
WX64	TH75-5A	US	" "	O	-	A
WY64	TH75-5B	US	LOWER "	O	-	A
WX69	TH75-9A	US	UPPER "	O	-	A
WY69	TH75-9B	US	LOWER "	O	-	A
WY68	TH75-10B	US	" "	O	-	A
WX65	TH75-13A	US	UPPER "	O	-	A
WY65	TH75-13B	US	LOWER "	O	-	A
WX67	TH75-18A	US	UPPER "	O	-	A
WY67	TH75-18B	US	LOWER "	O	-	A
WX72	TH75-15A	US	UPPER "	O	-	A
WY72	TH75-15B	US	LOWER "	O	-	A
WY66	EQUITY 1	EQUITY	" "	O	-	A
WY70	EQUITY SIA	EQUITY	" "	O	-	A
WV01	GREENO-404	SHELL	COMPOSITE	O	-	A
WX71	CER RB-D-02	US	UPPER AQUIFER	O	-	A
WY71	CER RB-D-03	US	LOWER "	O	-	A
WY75	TG-71-3	TOSCO	" "	O	-	A
WY78	TG-71-4	"	" "	O	-	A
WY76	TG-71-5	"	" "	O	-	A
WV02	OLDLAND 3	"	COMPOSITE	O	-	A
WV03	GP-17X-BG	US	" "	O	-	A
WV04	BUTE 25	TOSCO	" "	O	-	A
WV05	LIBERTY	TOSCO	" "	O	-	A
WX73	BELL 12	"	" "	O	-	A
WY77	UNION 8-1	UNION	UPPER AQUIFER	O	-	A
WY77	GETTY 9-4D	GETTY	LOWER "	O	-	A
WY79	EQUITY BS-13	EQUITY	" "	O	-	A

**Colony TH-5 replaced Colony 12-596

B = Bimonthly
 M = Monthly
 S = Semiannual
 S/F = Semiannual field measurements
 C = Continuous
 Q = Quarterly
 A = Applicant
 M/D = Monthly if not diverted
 M₁ = Monthly for field measurements + Fluoride
 O₁ = Quarterly for field measurements + Fluoride
 S₁ = Semiannual but may be changed pending evaluation of hydrographs

Computer Code	Station Number	Stream Flow Description	-----Frequency-----		Measured By
			Discharge	Water Quality	
WU00	09306200	Piceance Creek near Ryan Gulch	C	P	F
WU07 (M)	09306007	Piceance Creek below Rio Blanco	C	P	F
WU22	09306022	Stewart Gulch above West Fork	C	P	F
WU36	09306036	Sorghum Gulch at Mouth	C	P	F
WU39	09306039	Cottonwood Gulch	C	P	F
WU42 (M)	09306042	Tributary of Piceance Creek (East No Name Gulch)	C	P	F
WU45*	09306045	Piceance Creek below East No Name Gulch	B	P	F
WU48	09304800	White River near Meeker (below return flows)	C	P	F
WU52	09306052	Scandard Gulch at Mouth	C	P	F
WU58	09306058	Willow Creek	C	P	F
WU61 (M)	09306061	Piceance Creek above Hunter Creek	C	P	F
WU62	09306222	Piceance Creek at White River	C	P	F

(M) = Major Site
* Starting in water year 1985

Computer Code	Designation	-----Frequency-----		Measured By
		Discharge	Water Quality	
WS01	CB S-1	M	M/S	F
WS02	CB S-2	M	M/S	F
WS03	CB S-3	M	M/S	F
WS04	CB S-4	M	M/S	F
WS06	CB S-6	M	M/S	F
WS66	CB S-6A	M	M/S	F
WS07	CB S-7	M	M/S	F
WS08	CB S-8	M	M/S	F
WS09	CB S-9	M	M/S	F
WS10	CB S-10	M	M/S	F
WS11	CB SEEP A	M	M/S	F
WS12	CB S-102	M	M/S	F
WS13	CB S-102A	M	M/S	F
WS21	CER-1	Q	-	A
WS22	B-3	Q	-	A
WS23	H-3	Q	-	A
WS24	F-3	Q	-	A
WS26	W-4	Q	-	A
WS28	CER-7	Q	-	A
WS30	P3 & P3A	Q	-	A
WS31	CER-6	Q	-	A
WS33	S-2	Q	-	A
WS34	W-3	Q	-	A
WS36	CB S-101	M	M/S	F

Computer Code	Designation	Precipitation			Measured By
		Name of Station	Frequency		
AB23	023	CB Station 023	C		A
AD28	028	Lysimeter site at Shale Pile	C		A

B = Bimonthly
 M = Monthly
 S = Semi-annual
 S/F = Semi-annual field measurements
 C = Continuous
 Q = Quarterly
 A = Applicant
 F = USGS
 P = Periodically measured
 M/S = Monthly field measurements; semi-annual lab analysis

TABLE 1.2-2
Deep Well Index

Aquifer or Zone	General Location	Computer Code	Well Designation	Levels Data on Page	Levels Plot on Page	Water Quality Data on Page
Unita	Close-In	WB03	B-102-3-2	I-101	I-161	NO DATA
		WC03	B-102-3-1	I-102	I-160	NO DATA
		WC17	SG-17-4	I-102	I-148	NO DATA
		WC22	22X1-3	I-102	I-156	NO DATA
		WC23	21X12-2	I-102	I-154	NO DATA
		WC91	SG-9-4	I-102	I-145	NO DATA
Upper	Close-In	WX38	AT-1A-1	I-107	I-134	NO DATA
		WX44	AT-1C-3	I-107	I-135	NO DATA
	Remote	WX64	TH75-5A	I-108	I-163	NO DATA
		WX65	TH75-13A	I-108	I-164	NO DATA
		WX67	TH75-18A	I-108	I-165	NO DATA
		WX69	TH75-9A	I-108	I-166	NO DATA
		WX71	CER RB-D-02	I-108	I-167	NO DATA
		WX72	TH75-15A	I-108	I-168	NO DATA
		WX73	UNION 8-1	I-108	I-169	NO DATA
		WX75	TH-5	NO DATA	I-170	NO DATA
	Close-In	WY44	AT-1	I-109	I-136	NO DATA
		WY45	AT-1C-1	NO DATA	I-135	I-407
		WY46	AT-1C-2	I-109	I-135	NO DATA
		WY81	SG-8R	I-109	I-144	I-407
	Remote	WY64	TH75-5B	I-110	I-172	NO DATA
		WY65	TH75-13B	I-110	I-173	NO DATA
		WY66	EQUITY 1	NO DATA	I-174	NO DATA
		WY67	TH75-18B	I-110	I-175	NO DATA
		WY68	TH75-10B	I-110	I-176	NO DATA
		WY69	TH75-9B	I-110	I-178	NO DATA
		WY70	EQUITY SIA	I-110	I-179	NO DATA
		WY71	CER RB-D-03	I-110	I-177	NO DATA
		WY72	TH75-15B	I-110	I-180	NO DATA
		WY75	TG-71-3	I-110	I-181	NO DATA
		WY76	TG-71-5	I-110	I-182	NO DATA
		WY77	GETTY 9-40	I-110	I-183	NO DATA
		WY78	TG-71-4	I-110	I-184	NO DATA
		WY79	EQUITY BS-13	I-110	I-185	NO DATA
Composite	Close-In	WV10	TG-71-1	I-111	I-192	NO DATA
		WV37	AT-1A	I-111	I-193	NO DATA
	Remote	WV01	GREENO 404	I-111	I-187	NO DATA
		WV02	OLDLAND 3	NO DATA	I-188	NO DATA
		WV03	GP-17X-BG	NO DATA	I-189	NO DATA
		WV04	BUTE 25	NO DATA	I-190	NO DATA
		WV05	LIBERTY BELL 12	I-111	I-191	NO DATA
		WV06	TOSCO WELL	NO DATA	NO DATA	NO DATA
		WV40	AT-1B	NO DATA	NO DATA	NO DATA
	Close-In	WD02	CB-2	I-103	I-138	NO DATA
		WD11	SG-1A-2	NO DATA	I-141	NO DATA
		WD12	SG-1-2	I-103	I-142	I-398
		WD14	14X-7-1	I-103	I-152	NO DATA
		WD15	14X-7-2	I-103	I-152	NO DATA
		WD17	SG-17-3	I-103	I-148	NO DATA
UPC1	Close-In	WD18	SG-18A-3	I-103	I-149	NO DATA
		WD19	SG-19	I-103	I-138	NO DATA
		WD20	SG-20-3	I-104	I-150	I-398
		WD21	SG-21-4	I-104	I-151	NO DATA
		WD22	22X1-3	I-104	I-155	NO DATA
		WD41	AT-1D-3	I-104	NO DATA	NO DATA
		WD51	SG-10A-A	I-104	I-146	NO DATA
		WD52	SG-11-3	I-104	I-147	NO DATA
		WD57	SG-17-A	I-104	I-139	I-398
		WD61	SG-6-3	I-104	I-143	NO DATA
		WD90	SG-10	I-104	I-139	NO DATA
		WD91	SG-9-3	I-104	I-145	NO DATA

TABLE 1.2-2 (Contd)

Deep Well Index

Aquifer or Zone	General Location	Computer Code	Well Designation	Levels Data on Page	Levels Plot on Page	Water Quality Data on Page
	Close-In (Seepage)	WW13	41X-13	I-207	I-139	NO DATA
		WW22	31X-12	I-207	I-139	NO DATA
		WW32	32Y-12	I-207	I-140	NO DATA
UPC2	Close-In	WE03	Cb-3	I-105	I-138	NO DATA
		WE04	Cb-4	I-105	I-139	NO DATA
		WE11	SG-1A-1	NO DATA	I-141	NO DATA
		WE17	SG-17-2	I-105	I-148	NO DATA
		WE18	SG-18-2	I-105	I-149	NO DATA
		WE20	SG-20-2	I-105	I-150	I-401
		WE22	22X1-1	NO DATA	NO DATA	NO DATA
		WE21	SG-21-3	I-105	I-151	NO DATA
		WE41	AT-1D-2	I-105	I-136	NO DATA
		WE43	43X2-2	I-105	I-159	NO DATA
		WE51	SG-10A-2	I-105	I-146	NO DATA
		WE52	SG-11-2	I-105	I-147	NO DATA
		WE61	SG-6-1	I-105	I-143	NO DATA
		WE91	SG-9-2	I-105	I-145	NO DATA
		WX32	32X-12	I-107	I-157	NO DATA
		Close-In (Injection)	WI17	I-204	I-206	NO DATA
			WI18	NO DATA	NO DATA	NO DATA
			WI19	I-204	I-207	NO DATA
LPC3	Close-In	WG12	SG-1-1	I-106	I-142	I-404
		WG17	SG-17-1	I-106	I-148	NO DATA
		WG18	SG-18A-1	I-106	I-149	NO DATA
		WG20	SG-20-1*	I-106		I-404
		WG21	SG-21-2	I-106	I-151	NO DATA
		WG23	21X12-1	I-106	I-153	NO DATA
		WG41	AT-1D-1	I-106	I-136	NO DATA
		WG43	43X2-1	I-106	I-158	NO DATA
		WG51	SG-10A-1	I-106	I-146	NO DATA
		WG52	SG-11-1	I-106	I-147	NO DATA
		WG61	SG-6-2	I-106	I-143	NO DATA
		WG91	SG-9-1	I-106	I-145	NO DATA
LPC4	Close-In	WH21	SG-21-1	I-106	I-151	NO DATA

* Data Identical to SG-20-2

TABLE 1-1-1 (Cont'd)

Base Soil Index

Location	Sample	Depth	Level	Level	Level
Location	Sample	Depth	Level	Level	Level
Class-1A	W11	1-101	1-101	1-101	1-101
Class-1A	W12	1-102	1-102	1-102	1-102
Class-1A	W13	1-103	1-103	1-103	1-103
Class-1A	W14	1-104	1-104	1-104	1-104
Class-1A	W15	1-105	1-105	1-105	1-105
Class-1A	W16	1-106	1-106	1-106	1-106
Class-1A	W17	1-107	1-107	1-107	1-107
Class-1A	W18	1-108	1-108	1-108	1-108
Class-1A	W19	1-109	1-109	1-109	1-109
Class-1A	W20	1-110	1-110	1-110	1-110
Class-1A	W21	1-111	1-111	1-111	1-111
Class-1A	W22	1-112	1-112	1-112	1-112
Class-1A	W23	1-113	1-113	1-113	1-113
Class-1A	W24	1-114	1-114	1-114	1-114
Class-1A	W25	1-115	1-115	1-115	1-115
Class-1A	W26	1-116	1-116	1-116	1-116
Class-1A	W27	1-117	1-117	1-117	1-117
Class-1A	W28	1-118	1-118	1-118	1-118
Class-1A	W29	1-119	1-119	1-119	1-119
Class-1A	W30	1-120	1-120	1-120	1-120
Class-1A	W31	1-121	1-121	1-121	1-121
Class-1A	W32	1-122	1-122	1-122	1-122
Class-1A	W33	1-123	1-123	1-123	1-123
Class-1A	W34	1-124	1-124	1-124	1-124
Class-1A	W35	1-125	1-125	1-125	1-125
Class-1A	W36	1-126	1-126	1-126	1-126
Class-1A	W37	1-127	1-127	1-127	1-127
Class-1A	W38	1-128	1-128	1-128	1-128
Class-1A	W39	1-129	1-129	1-129	1-129
Class-1A	W40	1-130	1-130	1-130	1-130
Class-1A	W41	1-131	1-131	1-131	1-131
Class-1A	W42	1-132	1-132	1-132	1-132
Class-1A	W43	1-133	1-133	1-133	1-133
Class-1A	W44	1-134	1-134	1-134	1-134
Class-1A	W45	1-135	1-135	1-135	1-135
Class-1A	W46	1-136	1-136	1-136	1-136
Class-1A	W47	1-137	1-137	1-137	1-137
Class-1A	W48	1-138	1-138	1-138	1-138
Class-1A	W49	1-139	1-139	1-139	1-139
Class-1A	W50	1-140	1-140	1-140	1-140
Class-1A	W51	1-141	1-141	1-141	1-141
Class-1A	W52	1-142	1-142	1-142	1-142
Class-1A	W53	1-143	1-143	1-143	1-143
Class-1A	W54	1-144	1-144	1-144	1-144
Class-1A	W55	1-145	1-145	1-145	1-145
Class-1A	W56	1-146	1-146	1-146	1-146
Class-1A	W57	1-147	1-147	1-147	1-147
Class-1A	W58	1-148	1-148	1-148	1-148
Class-1A	W59	1-149	1-149	1-149	1-149
Class-1A	W60	1-150	1-150	1-150	1-150
Class-1A	W61	1-151	1-151	1-151	1-151
Class-1A	W62	1-152	1-152	1-152	1-152
Class-1A	W63	1-153	1-153	1-153	1-153
Class-1A	W64	1-154	1-154	1-154	1-154
Class-1A	W65	1-155	1-155	1-155	1-155
Class-1A	W66	1-156	1-156	1-156	1-156
Class-1A	W67	1-157	1-157	1-157	1-157
Class-1A	W68	1-158	1-158	1-158	1-158
Class-1A	W69	1-159	1-159	1-159	1-159
Class-1A	W70	1-160	1-160	1-160	1-160
Class-1A	W71	1-161	1-161	1-161	1-161
Class-1A	W72	1-162	1-162	1-162	1-162
Class-1A	W73	1-163	1-163	1-163	1-163
Class-1A	W74	1-164	1-164	1-164	1-164
Class-1A	W75	1-165	1-165	1-165	1-165
Class-1A	W76	1-166	1-166	1-166	1-166
Class-1A	W77	1-167	1-167	1-167	1-167
Class-1A	W78	1-168	1-168	1-168	1-168
Class-1A	W79	1-169	1-169	1-169	1-169
Class-1A	W80	1-170	1-170	1-170	1-170
Class-1A	W81	1-171	1-171	1-171	1-171
Class-1A	W82	1-172	1-172	1-172	1-172
Class-1A	W83	1-173	1-173	1-173	1-173
Class-1A	W84	1-174	1-174	1-174	1-174
Class-1A	W85	1-175	1-175	1-175	1-175
Class-1A	W86	1-176	1-176	1-176	1-176
Class-1A	W87	1-177	1-177	1-177	1-177
Class-1A	W88	1-178	1-178	1-178	1-178
Class-1A	W89	1-179	1-179	1-179	1-179
Class-1A	W90	1-180	1-180	1-180	1-180
Class-1A	W91	1-181	1-181	1-181	1-181
Class-1A	W92	1-182	1-182	1-182	1-182
Class-1A	W93	1-183	1-183	1-183	1-183
Class-1A	W94	1-184	1-184	1-184	1-184
Class-1A	W95	1-185	1-185	1-185	1-185
Class-1A	W96	1-186	1-186	1-186	1-186
Class-1A	W97	1-187	1-187	1-187	1-187
Class-1A	W98	1-188	1-188	1-188	1-188
Class-1A	W99	1-189	1-189	1-189	1-189
Class-1A	W100	1-190	1-190	1-190	1-190

* Data (Interval) to 50-50-5

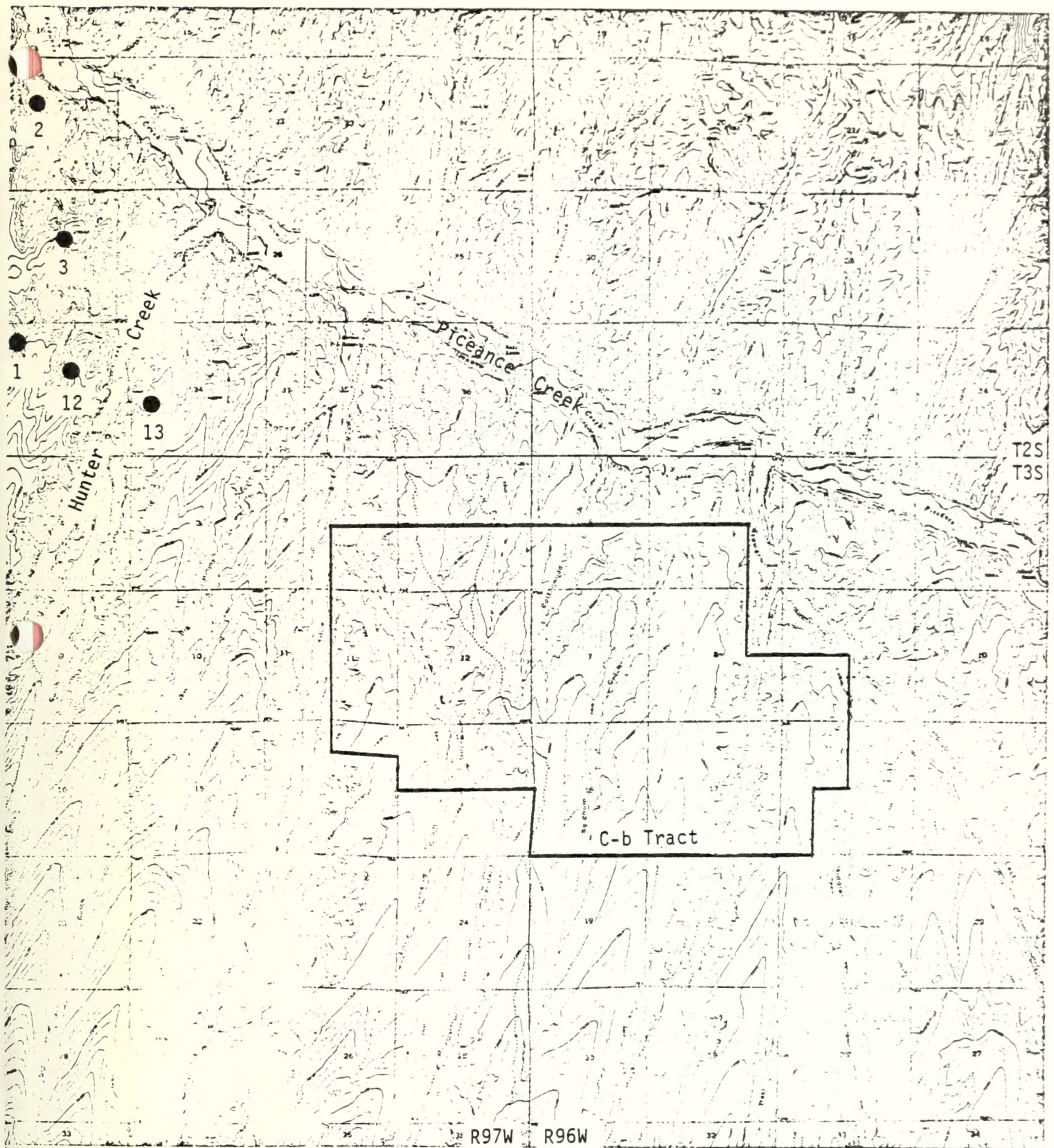


FIGURE 1.2-2
Mobil Well Locations





LEGEND

Symbol	Description
◆	Traffic counter stations
▲	Stream gaging station (prefix 0930 omitted from Station No.)
●	Observation well (may have multiple piezometers)
■	Spring or seep
★	Precipitation station
—	Paved roads
- - -	Other roads and trails
- - -	Topographic basin of Piceance Creek

NOTES

See Exhibit B for explanation of monitoring station designations, category and normal frequency of measurements, and entities making measurements.

EXHIBIT A

KEY FEATURES OF HYDROLOGIC MONITORING PROGRAM FOR Cb TRACT

PICEANCE CREEK BASIN
WATER DIVISION NO. 5
STATE OF COLORADO

LEVELS AND
FLOWS

1.2.1 Levels and Flows

Hydrologic flows of surface streams, springs and seeps, and water levels in alluvial wells, bedrock wells and impoundments are reported in the sub-sections which follow. Documents and/or permits (IMP, WAP, and NPDES) that require monitoring of these water types are identified within each sub-section.

Tabulated data and time series plots of all water locations follow in respective sub-sections.



**SURFACE
STREAMS**

1.2.1.1 Surface Streams

Daily mean discharge data for eleven major surface water gauging stations monitored for the Interim Monitoring Program (IMP) are included in this section. Location of these monitoring stations are shown on Figure 1.2.1.1-1 and 1.2.1.1-2. Data presented cover October 1983 through September 1984. Data for 1984 water year (October 1983 - September 1984) for stations WU00 and WU20 are presently in the WATSTOR data base and are classified as final. The 1984 water year data will not be entered into WATSTOR until spring of 1985. Changes will be made to these data through the water year if needed; therefore data for October 1983 - September 1984 are classified as preliminary.

The following table lists stations and the pages summarizing data for this reporting period.

TABLE 1.2.1.1-1
Guide for Surface Water Gauging Stations
Discharge Data

<u>Computer Code</u>	<u>Stations for Interim Monitoring</u>	<u>Tabulated Data Presented On Page</u>
WU07	09306007	I-16
WU22	09306022	I-17
WU36	09306036	I-18
WU39	09306039	I-19
WU42	09306042	I-20
WU52	09306052	I-21
WU58	09306058	I-22
WU61	09306061	I-23
WU00	09306200	I-24
WU62	09306222	I-28
WU45	09306045*	NO DATA
WU48	09304800	NO DATA

* Water year 1985

The first part of the report deals with the general situation of the country. It is a very interesting and informative study of the country's development. The second part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development. The third part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

The fourth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development. The fifth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

Table 1

Table 1 shows the results of the survey. It is a very detailed and thorough study of the country's development.

Year	Population	GDP
1950	100	100
1955	110	110
1960	120	120
1965	130	130
1970	140	140
1975	150	150
1980	160	160
1985	170	170
1990	180	180
1995	190	190
2000	200	200
2005	210	210
2010	220	220
2015	230	230
2020	240	240

Table 1 shows the results of the survey. It is a very detailed and thorough study of the country's development.

(1) STATIONS WU15, WU25, WU28, WU33, WU45, AND WU50 WERE DISCONTINUED DURING THE INTERIM MONITORING PROGRAM.

KEY

- HISTORICAL
- ⊙ CURRENT

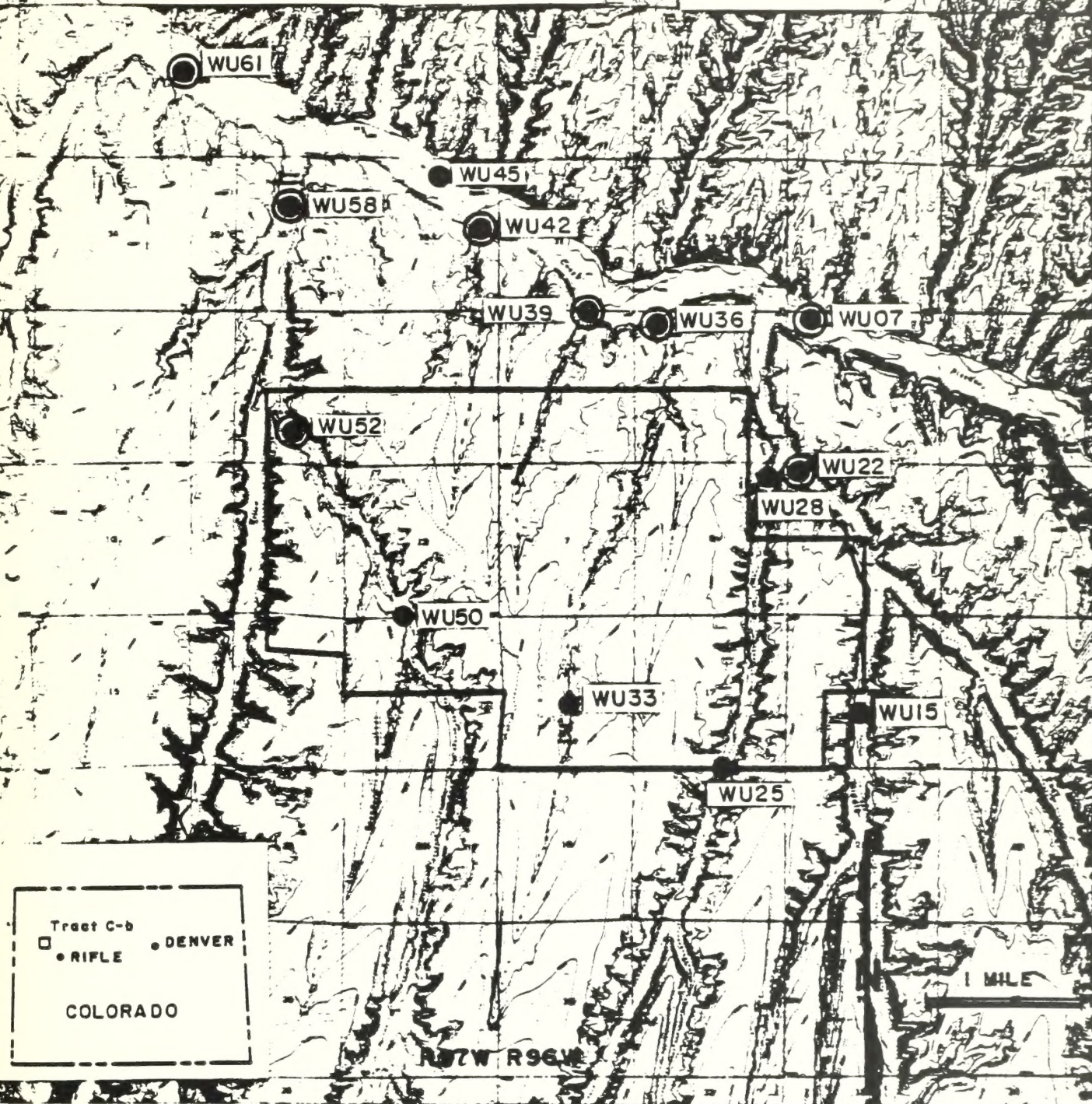


Figure I.2.1.1-1 NEAR-TRACT STREAM GAUGING STATION MONITORING NETWORK

STATIONS WITH WHICH THIS STATION
 AND WHICH WERE DETERMINED DURING
 THE INITIAL MONITORING PERIOD



Figure 11-1 NEAR-TRACT STREAM GAUGING STATION
 MONITORING NETWORK

(Base map supplied by the United States Geological Survey)



KEY

▲ CURRENT

1 2 N

R 94 W

R 95 W

R 96 W

7 W

R 98 W

R 99 W

00 W

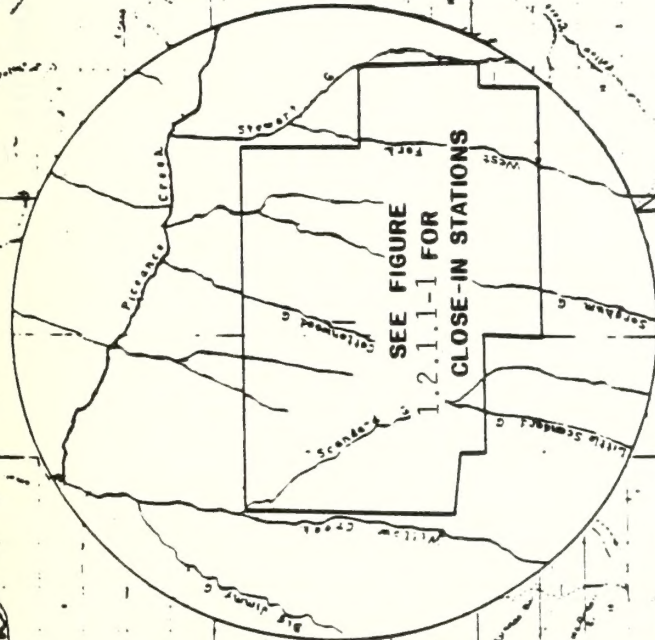
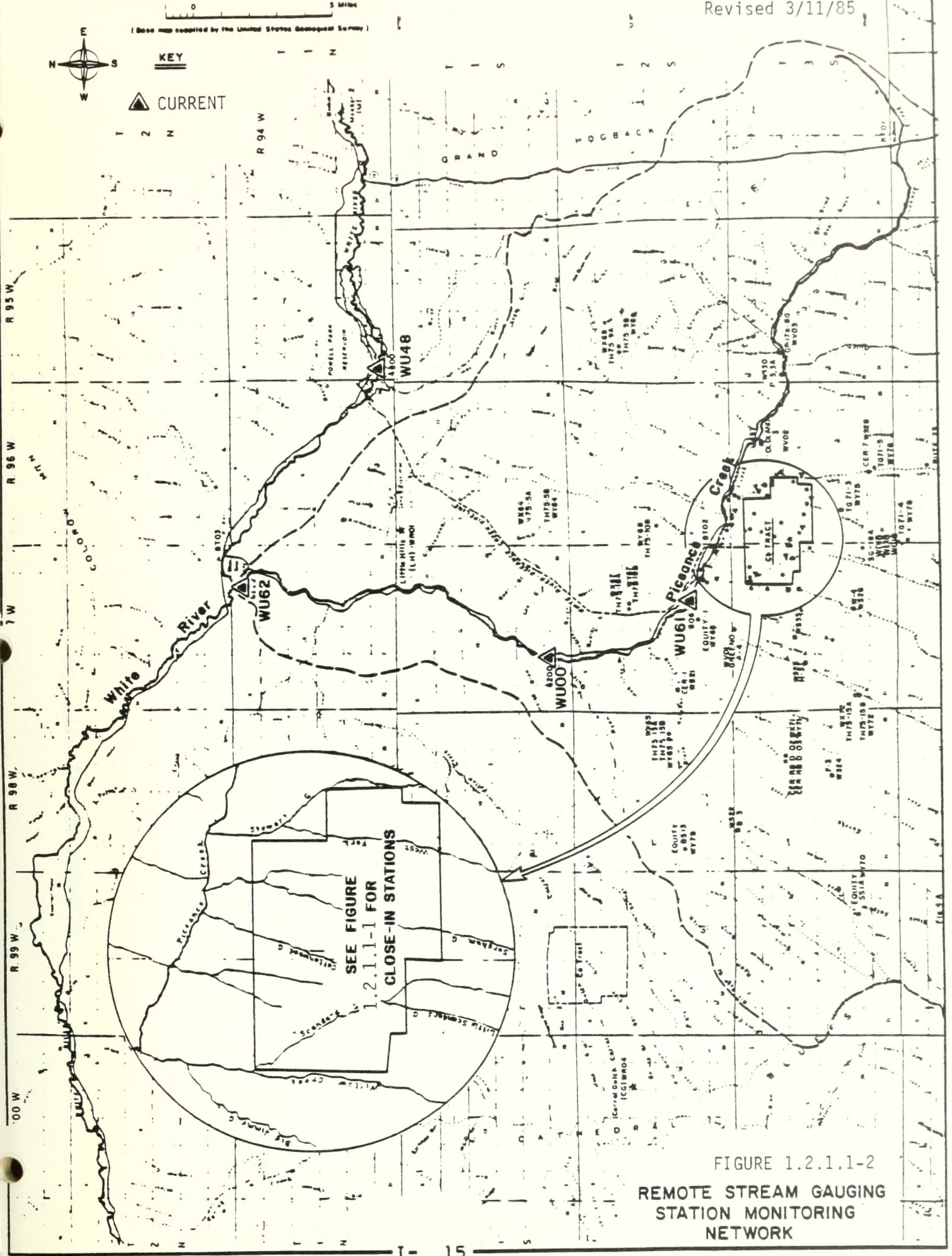


FIGURE 1.2.1.1-2
REMOTE STREAM GAUGING
STATION MONITORING
NETWORK



DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306007

PICEANCE CREEK BELOW RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	15.0	18.0	13.0	11.0	13.0	13.0	33.0	103.0	116.0	89.0	60.0	37.0
2	17.0	17.0	14.0	12.0	13.0	13.0	34.0	116.0	107.0	85.0	61.0	37.0
3	19.0	17.0	13.0	12.0	13.0	13.0	34.0	118.0	99.0	86.0	59.0	35.0
4	20.0	16.0	14.0	14.0	13.0	13.0	34.0	123.0	97.0	88.0	62.0	34.0
5	20.0	16.0	13.0	14.0	13.0	14.0	37.0	138.0	96.0	90.0	57.0	32.0
6	20.0	15.0	15.0	13.0	14.0	13.0	40.0	146.0	98.0	96.0	59.0	31.0
7	20.0	15.0	12.0	12.0	12.0	13.0	44.0	146.0	264.0	84.0	60.0	30.0
8	19.0	18.0	13.0	12.0	10.0	13.0	54.0	154.0	242.0	79.0	57.0	30.0
9	18.0	17.0	12.0	12.0	11.0	13.0	70.0	179.0	223.0	79.0	56.0	30.0
10	18.0	16.0	13.0	12.0	10.0	13.0	60.0	213.0	207.0	89.0	54.0	29.0
11	17.0	16.0	13.0	11.0	11.0	14.0	61.0	268.0	195.0	72.0	52.0	28.0
12	17.0	17.0	13.0	11.0	13.0	14.0	56.0	334.0	187.0	68.0	52.0	28.0
13	18.0	16.0	13.0	12.0	11.0	14.0	56.0	381.0	178.0	67.0	51.0	28.0
14	24.0	16.0	13.0	12.0	11.0	15.0	57.0	396.0	167.0	68.0	52.0	27.0
15	24.0	15.0	13.0	12.0	11.0	16.0	62.0	410.0	156.0	66.0	49.0	26.0
16	21.0	15.0	13.0	12.0	12.0	16.0	79.0	387.0	150.0	63.0	49.0	29.0
17	20.0	15.0	12.0	12.0	11.0	17.0	97.0	335.0	143.0	61.0	51.0	30.0
18	19.0	15.0	12.0	12.0	12.0	19.0	121.0	285.0	136.0	60.0	47.0	28.0
19	18.0	15.0	12.0	12.0	13.0	16.0	131.0	265.0	127.0	58.0	47.0	27.0
20	18.0	15.0	12.0	12.0	12.0	16.0	125.0	254.0	120.0	56.0	52.0	27.0
21	18.0	15.0	12.0	13.0	12.0	20.0	103.0	243.0	114.0	54.0	51.0	27.0
22	20.0	14.0	12.0	13.0	12.0	22.0	94.0	231.0	108.0	52.0	46.0	26.0
23	20.0	15.0	12.0	13.0	12.0	21.0	99.0	219.0	104.0	55.0	44.0	25.0
24	19.0	13.0	11.0	13.0	13.0	23.0	113.0	206.0	97.0	57.0	43.0	25.0
25	19.0	14.0	11.0	13.0	12.0	27.0	131.0	195.0	95.0	58.0	43.0	25.0
26	20.0	14.0	11.0	13.0	12.0	27.0	125.0	180.0	93.0	56.0	42.0	25.0
27	20.0	13.0	11.0	13.0	13.0	29.0	113.0	164.0	90.0	57.0	40.0	25.0
28	19.0	13.0	12.0	13.0	13.0	28.0	109.0	146.0	87.0	56.0	39.0	24.0
29	19.0	13.0	12.0	12.0	14.0	30.0	102.0	133.0	86.0	58.0	37.0	24.0
30	19.0	13.0	11.0	12.0		31.0	100.0	123.0	85.0	59.0	36.0	23.0
31	19.0		11.0	13.0		32.0	0.0	116.0		58.0	35.0	
TOTAL*	594.0	457.0	384.0	383.0	352.0	578.0	2374.0	6707.0	4067.0	2124.0	1543.0	852.0
WATER YEAR TOTAL		20415.0		MEAN	55.78							

Preliminary Record

*CFS - Days

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306022

STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	2.9	2.1	4.1	3.6	3.2	3.5	3.2	2.3	2.8	2.5	6.6	4.2
2	3.0	2.1	4.0	3.6	3.2	3.6	3.2	2.4	2.9	0.07	6.3	4.2
3	3.0	2.0	4.0	3.6	3.2	3.5	3.2	2.4	3.1	2.5	6.3	4.4
4	2.8	2.0	4.0	3.5	3.2	3.5	3.1	2.3	3.1	4.5	6.4	6.7
5	2.7	2.1	3.9	3.5	3.2	3.5	3.1	2.4	3.5	4.6	6.3	7.8
6	2.5	2.1	3.8	3.5	3.2	3.3	3.1	2.4	4.2	4.8	6.4	7.7
7	2.4	2.2	3.8	3.5	3.2	3.3	3.1	2.4	5.7	4.7	6.4	7.8
8	2.4	2.6	3.9	3.5	3.2	3.5	3.0	2.3	4.5	4.7	6.4	7.6
9	2.4	2.4	3.9	3.5	3.2	3.3	3.0	2.2	4.7	5.0	6.4	7.5
10	2.4	2.4	3.8	3.5	3.2	3.5	3.0	2.2	4.7	5.0	6.4	7.5
11	2.4	2.4	3.9	3.5	3.2	3.3	3.0	2.1	4.9	5.0	6.4	7.5
12	2.4	2.5	4.0	3.5	3.2	3.6	2.9	2.1	5.1	5.3	6.6	7.3
13	2.4	2.6	4.1	3.5	3.2	3.8	2.8	2.2	5.4	5.5	6.9	6.7
14	2.6	2.4	4.1	3.5	3.3	3.8	2.8	2.1	5.4	5.0	4.4	6.6
15	2.4	2.3	4.0	3.5	3.2	3.8	2.7	2.0	5.7	5.0	2.6	6.5
16	2.4	2.5	4.0	3.5	3.2	3.7	2.7	2.0	5.7	5.0	3.0	6.6
17	2.4	2.3	4.1	3.3	3.2	3.8	2.7	2.0	5.9	5.1	3.4	6.4
18	2.3	2.3	4.0	3.3	3.2	3.8	2.6	2.0	6.5	5.1	3.4	6.4
19	2.2	2.4	3.8	3.3	3.2	3.7	2.5	2.0	3.1	5.1	3.5	6.4
20	2.2	2.3	3.8	3.2	3.2	3.8	2.5	2.0	1.3	5.2	3.7	6.4
21	2.2	2.4	3.8	3.2	3.5	3.6	2.5	2.1	2.8	5.2	3.8	6.3
22	2.2	2.4	3.7	3.2	3.5	3.4	2.3	2.1	5.3	5.2	3.6	6.2
23	2.2	2.4	3.6	3.2	3.5	3.4	2.3	2.0	5.0	5.2	3.6	6.1
24	2.2	2.3	3.5	3.2	3.5	3.5	2.3	2.0	5.0	5.2	3.7	6.2
25	2.2	2.4	3.5	3.2	3.5	3.5	2.4	2.0	5.1	5.3	3.7	6.2
26	2.2	2.3	3.3	3.2	3.5	3.5	2.3	2.0	4.9	5.3	3.8	6.1
27	2.1	2.4	3.6	3.2	3.5	3.5	2.2	2.0	5.0	5.4	3.8	6.2
28	2.1	2.4	3.6	3.2	3.5	3.4	2.2	2.1	5.1	5.4	3.9	6.2
29	2.1	2.4	3.6	3.2	3.5	3.3	2.2	2.3	4.1	5.4	4.0	6.0
30	2.1	3.0	3.6	3.2	3.5	3.3	2.3	2.3	3.5	5.5	4.0	5.9
31	2.1		3.6	3.2		3.2	2.3	2.6		5.5	4.0	
TOTAL*	73.9	70.4	118.4	104.0	95.6	109.2	81.2	67.3	134.0	148.27	149.7	193.6
WATER YEAR TOTAL		1346.16		MEAN	3.68							

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306036
SORGHUM GULCH AT MOUTH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0		
8	0.0	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0		
9	0.0	0.06	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.38		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.07		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.03			
17	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.46			
18	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0			
TOTAL*	0.0	0.89	0.0	0.0	0.0	2.37	0.75	1.9	5.41	0.46		
WATER YEAR TOTAL		11.78		MEAN	0.03							

Preliminary Record

*CFS - Days

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306039
COTTONWOOD GULCH NEAR RANGELY, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.05	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0.10	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.02	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.01	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.12	0.0	2.5	
17	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.59	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	
TOTAL*	0.0	0.0	0.0	0.0	0.0	0.91	0.0	0.54	1.46	0.12	3.54	
WATER YEAR TOTAL		6.58		MEAN	0.02							

*CFS - Days

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306042

PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.45	0.40	0.49	0.53	0.59	0.49	0.52	0.55	0.51	0.50	6.6	
2	0.49	0.35	0.53	0.53	0.63	0.44	0.53	0.57	0.30	0.53	0.2	
3	0.53	0.44	0.53	0.53	0.54	0.49	0.54	0.61	0.38	1.10	0.15	
4	0.53	0.44	0.53	0.53	0.58	0.53	0.54	0.61	0.31	1.00	0.12	
5	0.53	0.40	0.53	0.53	0.58	0.55	0.57	0.55	0.36	0.61	0.1	
6	0.49	0.41	0.52	0.53	0.53	0.58	0.58	0.55	0.44	0.49	0.08	
7	0.49	0.42	0.52	0.53	0.52	0.60	0.59	0.53	1.80	0.49	0.05	
8	0.44	0.60	0.50	0.53	0.61	0.62	0.63	0.51	1.30	0.44	0.02	
9	0.44	0.57	0.50	0.53	0.60	0.60	0.68	0.49	0.58	0.76	0.0	
10	0.44	0.71	0.50	0.53	0.56	0.60	0.64	0.48	0.40	0.47	0.0	
11	0.44	0.58	0.50	0.53	0.51	0.60	0.68	0.45	0.93	0.34	0.0	
12	0.44	0.58	0.49	0.53	0.33	0.60	0.67	0.49	1.10	0.35	0.0	
13	0.40	0.77	0.53	0.58	0.50	0.60	0.63	0.55	1.40	0.69	0.0	
14	0.53	0.99	0.53	0.53	0.63	0.62	0.63	0.75	0.62	0.43	0.0	
15	0.49	0.99	0.53	0.49	0.58	0.58	0.66	0.42	0.67	0.68	0.0	
16	0.44	0.82	0.50	0.31	0.62	0.53	0.64	0.39	0.99	1.70	5.0	
17	0.40	0.62	0.49	0.33	0.67	0.53	0.73	0.40	0.71	1.40	0.0	
18	0.35	0.62	0.53	0.35	0.71	0.58	0.72	0.38	0.77	1.50	0.0	
19	0.35	0.62	0.49	0.37	0.65	0.71	0.67	0.37	0.58	1.50	0.0	
20	0.40	0.62	0.67	0.39	0.62	0.62	0.64	0.33	0.62	1.50	0.0	
21	0.40	0.62	0.53	0.41	0.60	0.60	0.64	0.46	0.62	1.00	0.0	
22	0.40	0.62	0.53	0.43	0.60	0.58	0.59	0.24	0.93	1.30	0.0	
23	0.44	0.53	0.53	0.45	0.60	0.50	0.50	0.24	1.10	1.10	0.0	
24	0.40	0.67	0.53	0.47	0.60	0.51	0.62	0.22	0.53	0.96	0.0	
25	0.40	0.67	0.53	0.49	0.60	0.55	0.76	0.24	0.49	0.95	0.0	
26	0.35	0.58	0.53	0.57	0.60	0.56	0.91	0.25	0.40	0.68	0.0	
27	0.40	0.58	0.53	0.61	0.60	0.63	0.68	0.32	0.40	0.40	0.0	
28	0.40	0.49	0.53	0.65	0.58	0.56	0.61	0.34	0.47	0.38	0.0	
29	0.40	0.49	0.53	0.60	0.58	0.54	0.57	0.31	0.48	0.31	0.0	
30	0.35	0.50	0.53	0.56		0.53	0.54	0.29	0.56	0.31	0.0	
31	0.49		0.53	0.55		0.52		0.74		0.22	0.0	
TOTAL*	13.51	17.68	16.24	15.51	16.91	17.55	18.92	13.65	20.74	24.09	12.32	
WATER YEAR TOTAL		187.12		MEAN	0.51							

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306052

SCANDARD GULCH AT MOUTH NEAR RIO BLANCO, CO

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUG</u>	<u>SEPT</u>
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	
TOTAL*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	2.0	0.0	0.61	
WATER YEAR TOTAL	- 2.80											
	MEAN - 0.01											

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306058

WILLOW CREEK NEAR RIO BLANCO, CO

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUG</u>	<u>SEPT</u>
1	8.3	6.1	5.6	6.0	5.7	4.7	5.2	6.7	8.7	12.0	12.0	5.4
2	8.6	6.1	5.9	6.0	5.6	4.9	5.3	6.8	8.9	10.0	10.0	5.3
3	8.8	6.0	6.2	6.1	5.6	4.9	4.9	6.8	8.5	8.9	9.9	5.2
4	8.7	6.0	6.0	6.1	5.5	4.6	4.7	7.1	8.8	10.0	9.2	5.2
5	8.4	6.1	5.8	6.2	5.4	4.5	5.0	7.3	9.3	8.1	9.5	5.1
6	8.5	5.9	5.6	6.2	5.3	4.4	5.3	7.4	11.0	6.4	9.3	4.8
7	8.2	5.8	5.5	6.3	5.1	4.3	5.4	7.4	14.0	9.8	9.2	4.1
8	7.8	5.5	5.5	6.2	4.9	4.3	5.3	7.3	12.0	10.0	8.5	4.5
9	7.7	5.3	5.8	6.1	4.7	5.0	5.6	7.3	5.9	8.5	8.1	4.9
10	7.6	5.3	5.8	6.3	4.8	4.9	5.3	7.5	4.6	10.0	8.0	4.8
11	7.5	5.3	6.2	6.1	4.9	5.0	5.7	7.5	6.6	12.0	8.6	5.1
12	7.3	5.3	6.2	6.1	4.8	4.7	5.1	7.5	7.0	11.0	8.4	4.6
13	7.4	5.4	6.1	5.9	4.8	5.3	5.2	7.5	7.0	11.0	7.8	4.0
14	7.9	5.4	6.2	6.0	5.0	5.9	5.2	7.6	7.2	11.0	7.7	3.5
15	7.3	5.5	6.2	6.0	4.8	6.2	5.2	7.4	4.7	12.0	7.4	3.5
16	7.1	5.5	6.0	4.6	4.8	6.1	5.2	7.6	3.0	12.0	7.2	3.8
17	6.9	5.6	5.8	4.0	4.5	5.6	5.3	8.4	4.3	12.0	6.0	2.7
18	7.1	5.7	6.0	3.7	4.4	5.2	5.6	8.0	5.2	12.0	5.4	2.6
19	6.9	5.8	6.1	2.3	4.4	4.1	5.8	6.9	5.9	11.0	5.4	3.0
20	6.9	5.9	6.1	2.5	4.4	4.8	6.0	7.4	6.1	12.0	5.5	4.0
21	6.7	6.0	6.0	3.5	4.4	5.9	6.1	8.2	5.9	12.0	5.6	3.8
22	6.7	5.7	6.0	4.5	4.2	6.1	6.0	8.7	6.2	12.0	5.6	3.4
23	6.5	6.2	6.0	5.8	4.3	5.4	6.1	9.3	5.9	11.0	5.5	3.0
24	6.4	5.4	5.8	5.5	4.3	5.4	6.0	9.0	8.3	12.0	5.5	3.2
25	6.4	5.6	5.8	5.5	4.7	5.7	6.1	8.8	9.1	12.0	5.4	3.4
26	6.4	5.1	5.8	5.8	4.7	5.2	6.2	8.3	7.7	12.0	5.4	3.8
27	6.3	5.5	5.5	5.6	4.7	5.1	6.2	8.1	6.8	11.0	5.0	3.9
28	6.2	5.3	5.8	5.6	4.7	4.8	6.3	8.3	8.9	9.5	5.1	3.6
29	6.2	5.5	5.8	5.6	4.7	4.9	6.5	9.4	8.7	9.3	5.1	3.6
30	6.2	5.4	5.8	5.6	4.7	5.2	6.7	9.1	11.0	9.8	5.3	3.7
31	6.1	5.6	5.9	5.6		4.9		9.1		9.8	5.3	
TOTAL*	225.0	169.2	182.8	167.3	140.1	158.0	168.5	243.7	227.2	330.1	221.9	121.5
WATER YEAR TOTAL		2355.3		MEAN	6.44							

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306061

PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	42.0	42.0	33.0	26.0	27.0	27.0	41.0	125.0	152.0	99.0	85.0	55.0
2	41.0	41.0	33.0	27.0	27.0	28.0	40.0	143.0	142.0	88.0	78.0	54.0
3	41.0	39.0	33.0	30.0	27.0	29.0	40.0	158.0	131.0	94.0	76.0	51.0
4	41.0	38.0	34.0	33.0	27.0	28.0	40.0	162.0	130.0	100.0	84.0	50.0
5	40.0	37.0	34.0	33.0	27.0	28.0	41.0	181.0	137.0	92.0	77.0	50.0
6	42.0	38.0	36.0	32.0	27.0	31.0	41.0	202.0	141.0	76.0	76.0	48.0
7	42.0	40.0	35.0	31.0	27.0	32.0	42.0	206.0	290.0	76.0	75.0	45.0
8	40.0	43.0	35.0	30.0	26.0	30.0	57.0	210.0	243.0	76.0	72.0	45.0
9	39.0	39.0	34.0	29.0	26.0	31.0	78.0	214.0	206.0	75.0	71.0	43.0
10	38.0	55.0	34.0	28.0	26.0	32.0	62.0	249.0	192.0	118.0	70.0	43.0
11	37.0	39.0	34.0	28.0	25.0	33.0	61.0	291.0	182.0	102.0	69.0	43.0
12	41.0	38.0	34.0	28.0	25.0	36.0	57.0	357.0	174.0	90.0	69.0	43.0
13	51.0	33.0	33.0	29.0	26.0	36.0	56.0	393.0	169.0	86.0	68.0	42.0
14	54.0	38.0	33.0	30.0	26.0	35.0	55.0	409.0	157.0	88.0	69.0	40.0
15	54.0	36.0	33.0	29.0	26.0	36.0	55.0	413.0	156.0	84.0	63.0	39.0
16	51.0	35.0	33.0	29.0	26.0	37.0	90.0	426.0	143.0	81.0	67.0	43.0
17	49.0	35.0	25.0	29.0	26.0	37.0	121.0	367.0	138.0	75.0	62.0	40.0
18	48.0	35.0	22.0	29.0	26.0	37.0	150.0	314.0	135.0	73.0	58.0	39.0
19	47.0	35.0	23.0	29.0	26.0	37.0	166.0	288.0	126.0	72.0	56.0	37.0
20	47.0	34.0	22.0	29.0	30.0	38.0	150.0	262.0	113.0	72.0	66.0	38.0
21	46.0	38.0	22.0	29.0	30.0	41.0	116.0	260.0	107.0	68.0	63.0	37.0
22	48.0	34.0	23.0	29.0	27.0	40.0	106.0	246.0	105.0	69.0	59.0	37.0
23	47.0	35.0	24.0	28.0	27.0	40.0	108.0	235.0	101.0	70.0	57.0	36.0
24	47.0	33.0	25.0	28.0	27.0	40.0	126.0	239.0	96.0	75.0	57.0	40.0
25	48.0	35.0	26.0	28.0	27.0	42.0	145.0	230.0	99.0	77.0	56.0	39.0
26	62.0	36.0	27.0	28.0	27.0	41.0	146.0	209.0	103.0	75.0	55.0	35.0
27	44.0	35.0	27.0	28.0	27.0	43.0	129.0	193.0	99.0	75.0	54.0	35.0
28	42.0	43.0	27.0	28.0	27.0	41.0	128.0	183.0	94.0	75.0	53.0	35.0
29	41.0	50.0	27.0	28.0	27.0	41.0	119.0	164.0	90.0	74.0	51.0	36.0
30	40.0	39.0	27.0	28.0	27.0	40.0	119.0	151.0	93.0	74.0	50.0	35.0
31	41.0		27.0	27.0		40.0		144.0		75.0	49.0	
TOTAL*	1391.0	1148.0	915.0	897.0	775.0	1107.0	2685.0	7624.0	4244.0	2524.0	2015.0	1253.0
WATER YEAR TOTAL		26536.0		MEAN	72.5							

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306200

PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	55.0	48.0	59.0	63.0	41.0	38.0	50.0	134.0	172.0	118.0	110.0	80.0
2	60.0	48.0	59.0	63.0	39.0	38.0	51.0	140.0	168.0	115.0	116.0	78.0
3	61.0	48.0	59.0	65.0	39.0	40.0	49.0	168.0	151.0	113.0	108.0	76.0
4	59.0	48.0	59.0	65.0	39.0	38.0	47.0	172.0	145.0	112.0	114.0	75.0
5	55.0	48.0	59.0	65.0	37.0	35.0	50.0	189.0	147.0	107.0	108.0	74.0
6	54.0	48.0	59.0	65.0	37.0	38.0	54.0	212.0	152.0	94.0	109.0	73.0
7	53.0	48.0	59.0	65.0	37.0	37.0	57.0	221.0	309.0	92.0	108.0	72.0
8	52.0	53.0	59.0	63.0	37.0	39.0	64.0	221.0	255.0	86.0	102.0	71.0
9	50.0	55.0	59.0	63.0	37.0	40.0	86.0	232.0	216.0	83.0	98.0	70.0
10	50.0	55.0	59.0	63.0	35.0	42.0	78.0	256.0	198.0	117.0	95.0	69.0
11	50.0	55.0	59.0	61.0	32.0	43.0	80.0	303.0	191.0	122.0	93.0	67.0
12	49.0	55.0	61.0	61.0	33.0	44.0	71.0	372.0	183.0	109.0	93.0	66.0
13	51.0	55.0	61.0	59.0	35.0	53.0	71.0	416.0	182.0	106.0	92.0	65.0
14	55.0	55.0	61.0	59.0	39.0	55.0	68.0	424.0	176.0	108.0	97.0	61.0
15	56.0	55.0	61.0	57.0	38.0	56.0	71.0	492.0	166.0	107.0	88.0	60.0
16	54.0	55.0	61.0	57.0	37.0	59.0	85.0	516.0	164.0	103.0	96.0	65.0
17	52.0	55.0	61.0	55.0	37.0	55.0	108.0	483.0	159.0	89.0	95.0	65.0
18	52.0	55.0	61.0	55.0	38.0	54.0	145.0	432.0	162.0	100.0	89.0	61.0
19	52.0	55.0	61.0	53.0	36.0	49.0	162.0	382.0	151.0	96.0	88.0	59.0
20	52.0	57.0	61.0	53.0	35.0	50.0	158.0	342.0	139.0	91.0	101.0	63.0
21	52.0	57.0	61.0	51.0	37.0	56.0	126.0	320.0	135.0	84.0	103.0	60.0
22	52.0	57.0	61.0	51.0	39.0	67.0	111.0	299.0	134.0	82.0	92.0	60.0
23	51.0	57.0	63.0	49.0	37.0	67.0	112.0	276.0	134.0	85.0	89.0	58.0
24	50.0	57.0	63.0	49.0	38.0	68.0	125.0	258.0	125.0	92.0	89.0	58.0
25	50.0	57.0	63.0	47.0	37.0	66.0	146.0	245.0	125.0	94.0	87.0	60.0
26	51.0	57.0	63.0	47.0	37.0	57.0	167.0	229.0	134.0	91.0	85.0	59.0
27	51.0	57.0	63.0	45.0	35.0	48.0	156.0	212.0	129.0	93.0	83.0	59.0
28	50.0	57.0	63.0	45.0	36.0	46.0	147.0	200.0	125.0	92.0	81.0	57.0
29	50.0	57.0	63.0	43.0	38.0	47.0	136.0	188.0	119.0	91.0	87.0	57.0
30	49.0	57.0	63.0	43.0		47.0	129.0	175.0	114.0	93.0	85.0	57.0
31	49.0		63.0	41.0		47.0		165.0		96.0	82.0	0.0
TOTAL*	1627.0	1621.0	1887.0	1721.0	1072.0	1519.0	2960.0	8674.0	4860.0	3061.0	2963.0	1955.0
WATER YEAR TOTAL	33920.0			MEAN	92.68							

*CFS - Days

Preliminary Record

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER
LATITUDE 395516

04306200
LONGITUDE

PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO.
DRAINAGE AREA 1081749

STREAM
6070.00 DATUM

SOURCE AGENCY USGS
STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1			55			48			59			63
2			60			48			59			63
3			61			48			59			65
4			59			48			59			65
5			55			48			59			65
6			54			48			59			65
7			53			48			59			65
8			52			53			59			63
9			50			55			59			63
10			50			55			59			63
11			50			55			59			61
12			49			55			61			61
13			51			55			61			59
14			55			55			61			59
15			56			55			61			57
16			54			55			61			57
17			52			55			61			55
18			52			55			61			55
19			52			55			61			53
20			52			57			61			53
21			52			57			61			51
22			52			57			61			51
23			51			57			63			49
24			50			57			63			49
25			50			57			63			47
26			51			57			63			47
27			51			57			63			45
28			50			57			63			45
29			50			57			63			43
30			49			57			63			43
31			49			57			63			41
MONTH			52			54			61			56

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09306200
LATITUDE 395516LONGITUDE 1081749
PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO.
DRAINAGE AREA 506.00 DATUM 6070.00STREAM SOURCE AGENCY USGS
STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1			41			38			50			134
2			39			38			51			140
3			39			40			49			168
4			39			38			47			172
5			37			35			50			189
6			37			38			54			212
7			37			37			57			221
8			37			39			64			221
9			37			40			86			232
10			35			42			78			256
11			32			43			80			303
12			33			44			71			372
13			35			53			71			416
14			39			55			68			424
15			38			56			71			492
16			37			59			85			516
17			37			55			108			483
18			38			54			145			432
19			36			49			162			382
20			35			50			158			342
21			37			56			126			320
22			39			67			111			299
23			37			67			112			276
24			38			68			125			258
25			37			66			146			245
26			37			57			167			229
27			35			48			156			212
28			36			46			147			200
29			38			47			136			188
30						47			129			175
31						47						165
MONTH			37			49			99			280

STATION NUMBER	09306200	PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO.	STREAM	SOURCE AGENCY USGS
LATITUDE	395516	LONGITUDE	1081749	DRAINAGE AREA
			506.00	DATUM
			6070.00	STATE 08
				COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

[illegible]

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306222

PICEANCE CREEK AT WHITE RIVER CITY, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	36.0	60.0	49.0	48.0	26.0	40.0	59.0	145.0	186.0	136.0	119.0	98.0
2	76.0	58.0	48.0	48.0	24.0	40.0	57.0	151.0	191.0	135.0	137.0	96.0
3	76.0	56.0	47.0	50.0	24.0	40.0	56.0	171.0	176.0	135.0	122.0	94.0
4	72.0	56.0	47.0	50.0	24.0	42.0	54.0	171.0	176.0	135.0	123.0	91.0
5	67.0	56.0	46.0	50.0	22.0	44.0	54.0	189.0	177.0	136.0	116.0	88.0
6	66.0	56.0	45.0	50.0	22.0	46.0	54.0	201.0	197.0	127.0	117.0	86.0
7	36.0	55.0	44.0	50.0	22.0	47.0	54.0	206.0	290.0	125.0	118.0	84.0
8	62.0	58.0	46.0	50.0	22.0	49.0	59.0	200.0	358.0	125.0	112.0	81.0
9	61.0	58.0	46.0	48.0	22.0	50.0	76.0	197.0	284.0	129.0	110.0	78.0
10	61.0	56.0	46.0	48.0	20.0	55.0	75.0	211.0	249.0	137.0	106.0	76.0
11	60.0	57.0	46.0	48.0	18.0	65.0	72.0	270.0	220.0	148.0	102.0	73.0
12	59.0	57.0	46.0	46.0	19.0	62.0	65.0	340.0	196.0	139.0	101.0	70.0
13	60.0	56.0	46.0	46.0	21.0	70.0	65.0	384.0	189.0	131.0	102.0	68.0
14	60.0	55.0	46.0	44.0	25.0	90.0	66.0	434.0	180.0	133.0	103.0	66.0
15	60.0	55.0	45.0	44.0	24.0	83.0	69.0	470.0	170.0	129.0	97.0	68.0
16	60.0	53.0	45.0	42.0	23.0	88.0	83.0	506.0	177.0	129.0	110.0	68.0
17	60.0	54.0	47.0	42.0	23.0	78.0	108.0	484.0	177.0	121.0	117.0	68.0
18	60.0	55.0	48.0	42.0	24.0	74.0	146.0	431.0	176.0	118.0	114.0	67.0
19	60.0	54.0	45.0	40.0	24.0	67.0	195.0	357.0	169.0	132.0	107.0	69.0
20	60.0	52.0	46.0	40.0	24.0	71.0	222.0	309.0	156.0	117.0	127.0	70.0
21	60.0	52.0	46.0	38.0	26.0	87.0	207.0	288.0	150.0	114.0	122.0	71.0
22	60.0	52.0	46.0	38.0	28.0	91.0	165.0	273.0	150.0	110.0	111.0	73.0
23	60.0	48.0	48.0	36.0	27.0	81.0	166.0	256.0	151.0	109.0	96.0	70.0
24	60.0	49.0	48.0	36.0	28.0	84.0	173.0	246.0	145.0	113.0	104.0	69.0
25	60.0	49.0	48.0	34.0	27.0	85.0	186.0	247.0	142.0	117.0	101.0	72.0
26	60.0	50.0	48.0	34.0	27.0	69.0	207.0	240.0	146.0	115.0	99.0	70.0
27	60.0	49.0	48.0	32.0	30.0	66.0	192.0	221.0	145.0	114.0	101.0	70.0
28	60.0	48.0	48.0	32.0	36.0	64.0	175.0	203.0	142.0	114.0	99.0	69.0
29	60.0	48.0	48.0	30.0	38.0	64.0	161.0	185.0	140.0	114.0	97.0	69.0
30	60.0	47.0	48.0	30.0	0.0	64.0	149.0	177.0	135.0	113.0	98.0	70.0
31	60.0	0.0	48.0	28.0	0.0	62.0	0.0	165.0	0.0	119.0	95.0	0.0
TOTAL*	1872.0	1609.0	1448.0	1294.0	720.0	2018.0	3470.0	8328.0	5540.0	3869.0	3383.0	2262.0
WATER YEAR TOTAL			35813.0	MEAN	97.85							

*CFS - Days

Preliminary Record

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200 LONGITUDE 1074929 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO. STREAM SOURCE AGENCY USGS
 LATITUDE 400018 DRAINAGE AREA 648.00 DATUM 6400.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

PROVISIONAL DATA

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1			367									
2			375									
3			428									
4			445									
5			---									
6			---									
7			---									
8			---									
9			---									
10			---									
11			---									
12			---									
13			---									
14			---									
15			---									
16			---									
17			---									
18			---									
19			---									
20			---									
21			---									
22			---									
23			---									
24			---									
25			---									
26			---									
27			---									
28			---									
29			---									
30			---									
31			---									
MONTH			404									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO. STREAM SOURCE AGENCY USGS
 LATITUDE 400018 LONGITUDE 1074929 DRAINAGE AREA 648.00 DATUM 6400.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

PROVISIONAL DATA

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200 LONGITUDE 1074929 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO. STREAM SOURCE AGENCY USGS
 LATITUDE 400018 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 DRAINAGE AREA 648.00 DATUM 6400.00 STATE 08 COUNTY 103

PROVISIONAL DATA

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												

MONTH

YEAR --- 404

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

SPRINGS AND SEEPS

1.2.1.2 Springs and Seeps

Flow and field measurement data were sampled at 22 springs and 1 seep during June through November 1984 and are presented in this section in tabular and plot form. Monitoring of these springs are required by the Interim Monitoring Program (IMP) and the Water Augmentation Plan (WAP); see Table 1.2-1. The IMP sampling requirements include flows and field measurements (temperature, pH and conductivity) taken monthly at five springs (WS04, WS06, WS07, WS12 and WS13). Monthly measurements are required at springs WS01, WS02, WS03, WS08, WS09, WS10, WS36, WS66, and seep WS11 if not diverted for seasonal irrigation; refer to Figure 1.2.1.2-1 for location. Nine springs located around the outer boundaries of C-b Tract can be referenced on Figure 1.2-1 (jacket map).

Tables 1.2.1.2-1 through 1.2.1.2-3 consist of data sampled during this report period for C-b Tract springs for flow and field measurements and flow of off-Tract springs.

Time series plots of flow data from 28 springs and 1 seep are presented for the period from 1979 through November 1984. See Table 1.2.1.2-4 for the page number of each spring plot.

Table 1.2-1 lists water stations and sampling schedule during the interim period.

The first of these is the fact that the
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MONITORING NETWORK FROM 1973-NEAR-TRACT SPINER AND 1973-2



TABLE 1.2.1.2-1

CB-TRACT
WATER FLOW AND FIELD MEASUREMENTS
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)	DISSOLVED OXYGEN (MG/L)
-----	--	--	--	--	-----	-----	---	-----	-----	-----
WS01	84	6	19		.00	9.0	7.7		1340.0	7.4
		8	1	LAB	.00		7.7		1400.0	
					3.80	8.5	7.8		1360.0	
			25		2.98	9.0	7.7		1381.0	6.3
		11	1		4.22	8.0	7.5		1360.0	5.8
WS02	84	6	21		.15	10.0	8.0		1220.0	8.5
		8	1	LAB	.00		8.0		1210.0	
					.16		7.8		1200.0	
		9	25		.16	10.0	7.9		1205.0	8.3
		11	1		.14	9.0	7.6		1230.0	8.7
WS03	84	6	19		4.60	12.5	7.8		1360.0	9.6
			25		4.80					
		8	1		2.30	9.0	7.6		1430.0	
		9	25		5.34	9.5	7.5		1438.0	6.4
		11	1		1.93	8.5	7.5		1390.0	5.4
WS04	84	6	21		1.02	11.0	8.1		1240.0	8.4
			25		1.59					
		8	1		2.80	11.0	8.2		1220.0	
		9	25	INACSS	.00	9.0	7.8		1220.0	8.5
		11	1		2.90	9.0	7.7		1200.0	8.7
WS06	84	6	19		1.88	17.5	7.9		1340.0	6.7
			25		3.18					
		9	14		.79	10.0	7.6		1460.0	4.8
			25		3.76	10.0	7.4		1456.0	4.4
		11	1		2.85	10.0	7.4		1440.0	3.9
WS07	84	6	19		.37	11.0	7.5		1430.0	7.2
		9	14		.37	10.0	7.7		1430.0	6.0
			25		.27	9.0	7.5		1463.0	6.5
		11	1		.26	9.0	7.6		1430.0	
WS08	84	6	19		.19	9.5	7.5		1370.0	5.0
			25		.28					

DRY = SPRING DRY
 NOFLME = NO FLUME
 - = LESS THAN
 DIVERT = FLOW DIVERTED FOR IRRIGATION
 INACSS = INACCESSIBLE

CB-TRACT
WATER FLOW AND FIELD MEASUREMENTS
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)	DISSOLVE OXYGEN (MG/L)
WS08	84	8	1	LAR	.00		7.7		1430.0	
					.10	10.0	7.7			
					.05	10.0	7.7			
		9	25		.23	10.0	7.6		1334.0	4.1
		11	1		.01	9.0	7.4		1450.0	4.6
WS09	84	6	19		.22	13.5	7.7		1360.0	8.5
		8	1	LAR	.00		7.9		1400.0	
					.17	11.0	7.8		1360.0	
		9	25		.12	7.0	7.7		1405.0	6.6
		11	1		.08	9.0	7.6		1390.0	6.2
WS10	84	6	19		.56	17.0	7.9		1300.0	13.0
		9	25		.42	8.0	7.9		1320.0	7.5
		11	1		.32	5.5	7.9		1330.0	9.9
WS11	84	6	19		.47	10.0	7.6		1320.0	6.6
		8	1	LAR	.00		7.7		1370.0	
					.50	9.5	7.7		1390.0	
		9	25	INACSS	.00	8.0	7.6		1328.0	7.5
WS12	84	6	19		.42	14.0	8.0		1550.0	8.8
		8	1	LAR	.00		8.2		1630.0	
					.36	12.0	7.9		1580.0	
		9	25		.08	11.0	8.0		1570.0	9.6
			26		.16		7.3	8.6	1580.0	
		11	1		.19	11.0	7.9			9.0
WS13	84	6	19		.40	9.5	7.7		1560.0	5.0
			20		.35	8.0	7.6	8.3	1520.0	
		8	1	LAR	.00		7.9		1650.0	
					.31	9.0	7.7		1600.0	
		9	25		.34	9.5	7.6		1578.0	5.7
		11	1		.44	10.5	7.6			5.7
WS22	84	8	31		.37					
		9	21		.36					

DRY = SPRING DRY

NOFLME = NO FLUME

- = LESS THAN

DIVERT = FLOW DIVERTED FOR IRRIGATION

INACSS = INACCESSIBLE

CB-TRACT
WATER FLOW AND FIELD MEASUREMENTS
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)	DISSOLVE OXYGEN (MG/L)
-----	--	--	--	--	-----	-----	---	-----	-----	-----
WS23	84	8	31		2.09					
		9	21		2.16					
WS26	84	8	31		.30					
		9	21		.23					
WS30	84	7	11		12.30					
		10	11		3.44					
WS31	84	8	31		6.00					
		9	21		6.00					
WS34	84	8	31		.82					
		9	21		.73					
WS36	84	6	21		6.00	11.0	8.2		1350.0	9.0
			25		5.60					
		8	1	LAR	.00		8.2		1340.0	
					6.20	10.5	8.2		1310.0	
					6.20	10.5	8.2		1310.0	
		9	25		5.55	11.0	8.0		1320.0	8.7
		11	1		6.09	7.5	8.0		1350.0	9.1
WS66	84	6	19		1.04					
		9	14		.01	12.0	7.7		1530.0	3.6
			25		.99	8.0	8.3		1320.0	9.3

DRY = SPRING DRY

NOFLME = NO FLUME

- = LESS THAN

DIVERT = FLOW DIVERTED FOR IRRIGATION

INACSS = INACCESSIBLE

BLANK

10/10/2010

TABLE 1.2.1.2-3

CB-TRACT
 STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
84	5	1	.78	.37	.23
		2	.82	.37	.25
		3	.78	.37	.22
		4	.78	.37	.22
		5	.78	.37	.22
		6	.76	.37	.22
		7	.76	.37	.22
		8	.76	.37	.22
		9	.76	.37	.20
		10	.73	.37	.20
		11	.71	.37	.20
		12	.71	.37	.20
		13	.71	.37	.22
		14	.69	.37	.22
		15	.69	.37	.22
		16	.69	.37	.22
		17	.67	.37	.26
		18	.67	.38	.25
		19	.67	.38	.25
		20	.67	.38	.23
		21	.67	.38	.22
		22	.67	.39	.20
		23	.62	.39	.47
		24	.67	.39	.47
		25	.67	.39	.47
		26	.67		.47
		27	.67		.47
		28	.71		.45
		29	.71	.45	.45
		30	1.04	.55	.45
		31	1.28	.55	.43
	6	1	1.51	.53	.48
		2	1.48	.53	.45
		3	1.45	.53	.43
		4	1.59	.53	.43
		5	1.68	.60	.43
		6	1.84	.56	.45
		7	1.93	.56	
		8	2.26	.56	
		9	2.09	.56	.54
		10	2.04	.53	.50
		11	2.13	.53	.50
		12	2.16	.53	.48
		13	2.16	.53	
		14	2.06	.53	.48
		15	2.09	.56	

TABLE 1.2.1.2-3 (Cont'd)

CB-TRACT
 STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
<hr/>					
84	6	16	2.13	.56	.50
		17	2.19	.56	.50
		18	2.19	.56	.48
		19	2.19	.56	.48
		20	2.19	.56	.48
		21	2.23	.56	.48
		22	2.16	.56	.47
		23	2.16	.56	.47
		24	2.16	.56	.45
		25	2.19	.56	.45
		26	2.19	.61	.45
		27	2.19	.61	.45
		28	1.59	.61	.45
		29	1.62	.61	.43
		30	1.68	.61	.43
	7	1	1.71	.64	.45
		2	1.74	.64	.43
		3	1.74	.64	.43
		4	1.77	.64	.43
		5	1.81	.64	.43
		6	1.81	.64	1.15
		7	1.81	.64	2.13
		8	1.90	.64	2.09
		9	1.90	.79	.45
		10	2.03	.68	.45
		11	2.00	.68	.45
		12	1.93	.68	.43
		13	1.93	.68	.43
		14	2.03	.68	.43
		15	2.03	.68	.43
		16	2.03	.68	.43
		17	2.03	.68	.43
		18	2.06	.68	.43
		19	2.09	.61	.43
		20	2.09	.61	.43
		21	2.09	.61	.43
		22	2.16	.62	.43
		23		.62	.43
		24		.62	.43
		25		.62	.43
		26		.62	.43
		27		.62	.43
		28		.62	.43
		29		.62	.43
		30		.62	.43
		31			.43

TABLE 1.2.1.2-3 (Cont'd)

CB-TRACT
 STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
<hr/>					
84	8	1			.43
		2			.45
		3			.45
		4			.43
		5			.43
		6			.43
		7			.43
		8			.43
		9			.43
		10			.43
		11			.43
		12			.43
		13			.43
		14			.43
		15			.43
		16			.43
		17			.43
		18			.43
		19			.43
		20			.45
		21			.45
		22			.45
		23			.43
		24			.43
		25			.43
		26			.43
		27			.43
		28			.43
		29			.43
		30			.43
		31			.43
	9	1			.43
		2			.43
		3			.43
		4			.43
		5			.43
		6			.41
		7			.41
		8			.41
		9			.41
		10			.41
		11			.41
		12			.41
		13			.41
		14			.41
		15			.41

TABLE 1.2.1.2-3 (Cont'd)

CB-TRACT
 STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
 FOR SAMPLE DATE SHOWN

YR	MO	DAY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
<hr/>					
84	9	16			.41
		17			.45
		18			.43
		19			.43
		20			.28
		21			.25
		22			.22
		23			.22
		24			.20
		25			.19
		26			.20
		27		.42	.10
		28		.42	
		29		.42	
		30		.42	
	10	1		.46	
		2		.51	
		3		.44	
		4		.42	
		5		.38	
		6		.38	
		7		.38	
		8		.38	
		9		.38	
		10		.38	
		11		.38	
		12		.42	
		13		.41	
		14		.41	
		15		.39	
		16		.38	
		17		.38	
		18		.38	
		19		.38	
		20		.38	
		21		.38	
		22		.38	
		23		.38	
		24		.38	
		25		.38	
		26		.38	
		27		.38	
		28		.37	
		29		.37	
		30		.37	
		31		.37	

TABLE 1.2.1.2-3 (Cont'd)

CB-TRACT
 STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04	WS11	WS12
			FLOW (CFS)	FLOW (CFS)	FLOW (CFS)
84	11	1		.36	
		2		.35	
		3		.35	
		4		.35	
		5		.35	
		6		.35	
		7		.35	
		8		.35	
		9		.35	
		10		.35	
		11		.35	
		12		.35	
		13		.35	
		14		.35	
		15		.35	
		16		.35	
		17		.35	
		18		.35	
		19		.35	
		20		.35	
		21		.35	
		22		.35	
		23		.35	
		24		.35	
		25		.35	
		26		.35	
		27		.35	
		28		.34	
		30			

(1' x 10') 5-2, 1, 2, 3 (10' x 10')

STEVENS RECORDER WATER FLOW FOR ENGINE AND REEF
 12-17-83

TIME	WELL	WELL	WELL	WELL	WELL	WELL
TIME	WELL	WELL	WELL	WELL	WELL	WELL
11:00	11:00	11:00	11:00	11:00	11:00	11:00
11:05	11:05	11:05	11:05	11:05	11:05	11:05
11:10	11:10	11:10	11:10	11:10	11:10	11:10
11:15	11:15	11:15	11:15	11:15	11:15	11:15
11:20	11:20	11:20	11:20	11:20	11:20	11:20
11:25	11:25	11:25	11:25	11:25	11:25	11:25
11:30	11:30	11:30	11:30	11:30	11:30	11:30
11:35	11:35	11:35	11:35	11:35	11:35	11:35
11:40	11:40	11:40	11:40	11:40	11:40	11:40
11:45	11:45	11:45	11:45	11:45	11:45	11:45
11:50	11:50	11:50	11:50	11:50	11:50	11:50
11:55	11:55	11:55	11:55	11:55	11:55	11:55
12:00	12:00	12:00	12:00	12:00	12:00	12:00
12:05	12:05	12:05	12:05	12:05	12:05	12:05
12:10	12:10	12:10	12:10	12:10	12:10	12:10
12:15	12:15	12:15	12:15	12:15	12:15	12:15
12:20	12:20	12:20	12:20	12:20	12:20	12:20
12:25	12:25	12:25	12:25	12:25	12:25	12:25
12:30	12:30	12:30	12:30	12:30	12:30	12:30
12:35	12:35	12:35	12:35	12:35	12:35	12:35
12:40	12:40	12:40	12:40	12:40	12:40	12:40
12:45	12:45	12:45	12:45	12:45	12:45	12:45
12:50	12:50	12:50	12:50	12:50	12:50	12:50
12:55	12:55	12:55	12:55	12:55	12:55	12:55
13:00	13:00	13:00	13:00	13:00	13:00	13:00
13:05	13:05	13:05	13:05	13:05	13:05	13:05
13:10	13:10	13:10	13:10	13:10	13:10	13:10
13:15	13:15	13:15	13:15	13:15	13:15	13:15
13:20	13:20	13:20	13:20	13:20	13:20	13:20
13:25	13:25	13:25	13:25	13:25	13:25	13:25
13:30	13:30	13:30	13:30	13:30	13:30	13:30
13:35	13:35	13:35	13:35	13:35	13:35	13:35
13:40	13:40	13:40	13:40	13:40	13:40	13:40
13:45	13:45	13:45	13:45	13:45	13:45	13:45
13:50	13:50	13:50	13:50	13:50	13:50	13:50
13:55	13:55	13:55	13:55	13:55	13:55	13:55
14:00	14:00	14:00	14:00	14:00	14:00	14:00

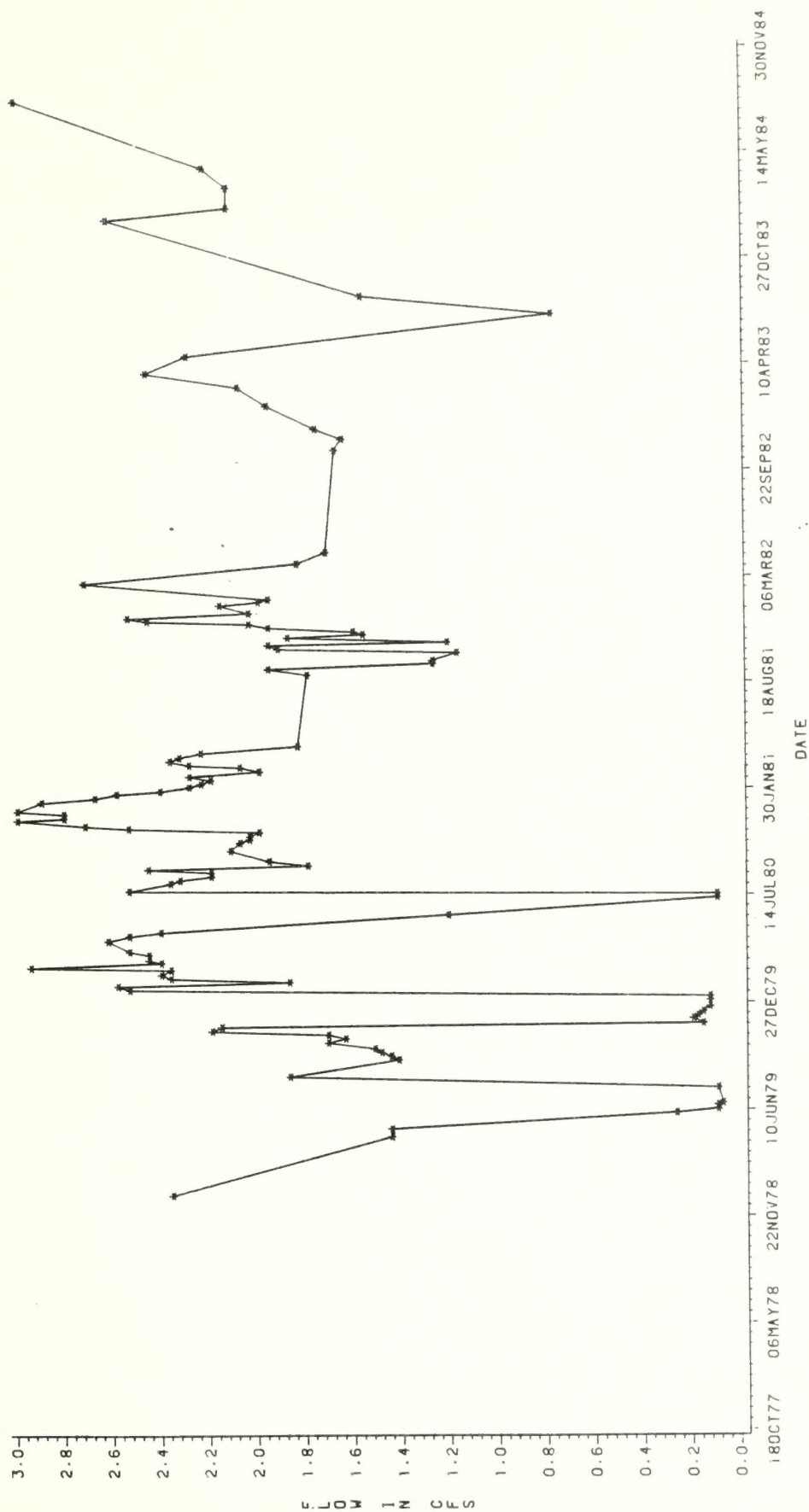
TABLE 1.2.1.2-4

LIST OF SPRING FLOW TIME SERIES PLOTS

<u>Computer Code</u>	<u>Location</u>	<u>Page No.</u>
WS01	CB S-1	I-45
WS02	CB S-2	I-46
WS03	CB S-3	I-47
WS04	CB S-4	I-48
WS06	CB S-6	I-49
WS07	CB S-7	I-50
WS08	CB S-8	I-51
WS09	CB S-9	I-52
WS10	CB S-10	I-53
WS11	CB S-10A (Seep)	I-54
WS12	CB S-102	I-55
WS13	CB S-102A	I-56
WS21	CER-1	I-57
WS22	B-3	I-58
WS23	H-3	I-59
WS24	F-3	I-60
WS25	Figure 4-A	I-61
WS26	W-4	I-62
WS27	W-9	I-63
WS28	CER-7	I-64
WS29	S-9	I-65
WS30	P3 & P3A	I-66
WS31	CER-6	I-67
WS32	W-2 (CB S-9)	I-68
WS33	S-2	I-69
WS34	W-3 (CB S-10)	I-70
WS35	Figure 4	I-71
WS36	CB S-101	I-72
WS37	Oldland Spring	I-73
WS66	CB S-6A	I-74

TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS01



TIME SERIES PLOT FOR SPRINGS AND SEEPS LOC=WS02

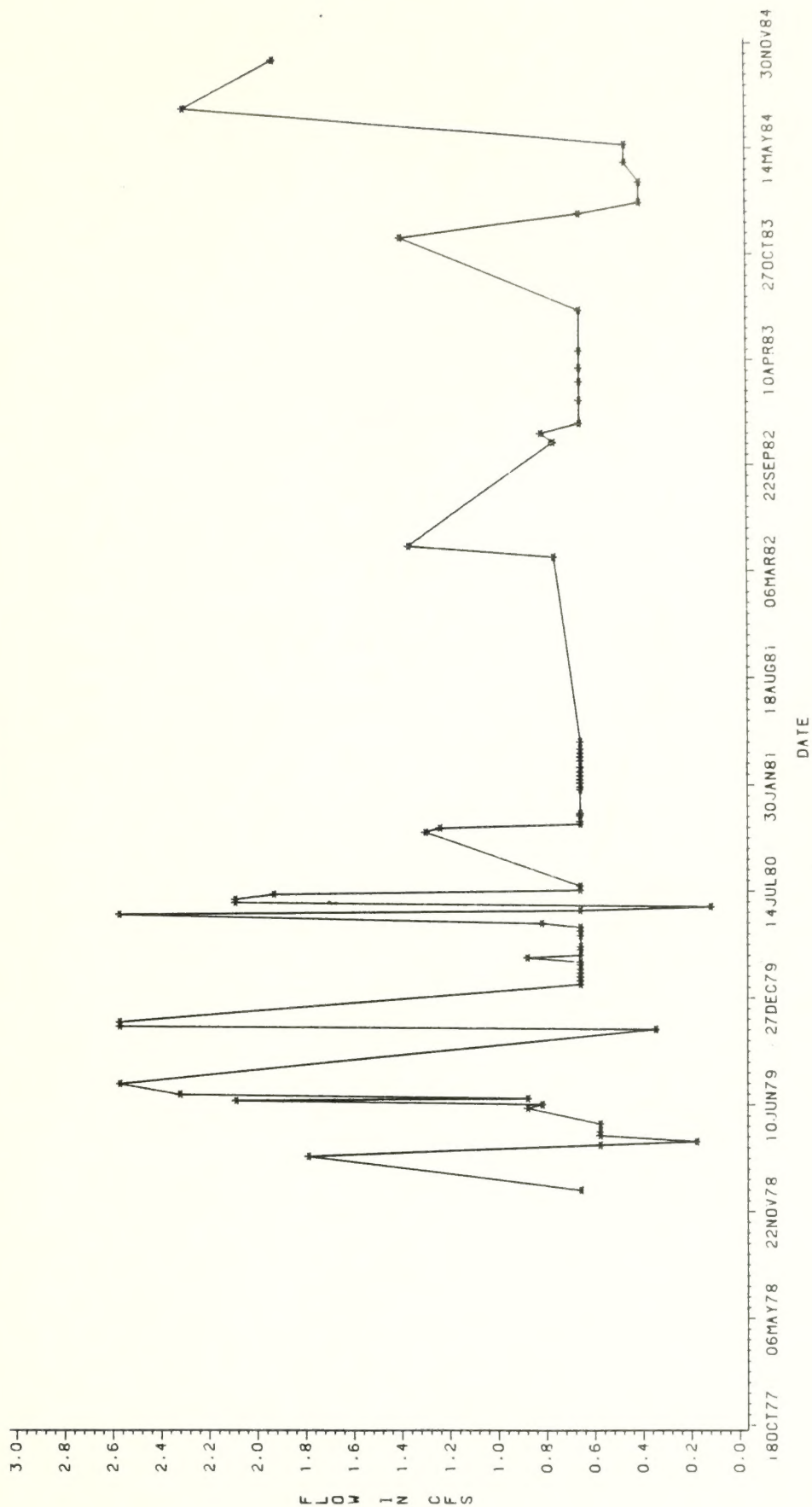




LINE SERIES 1 FOR 2.000000 AND 2.000000

TIME SERIES PLOT FOR SPRINGS AND SEEPS

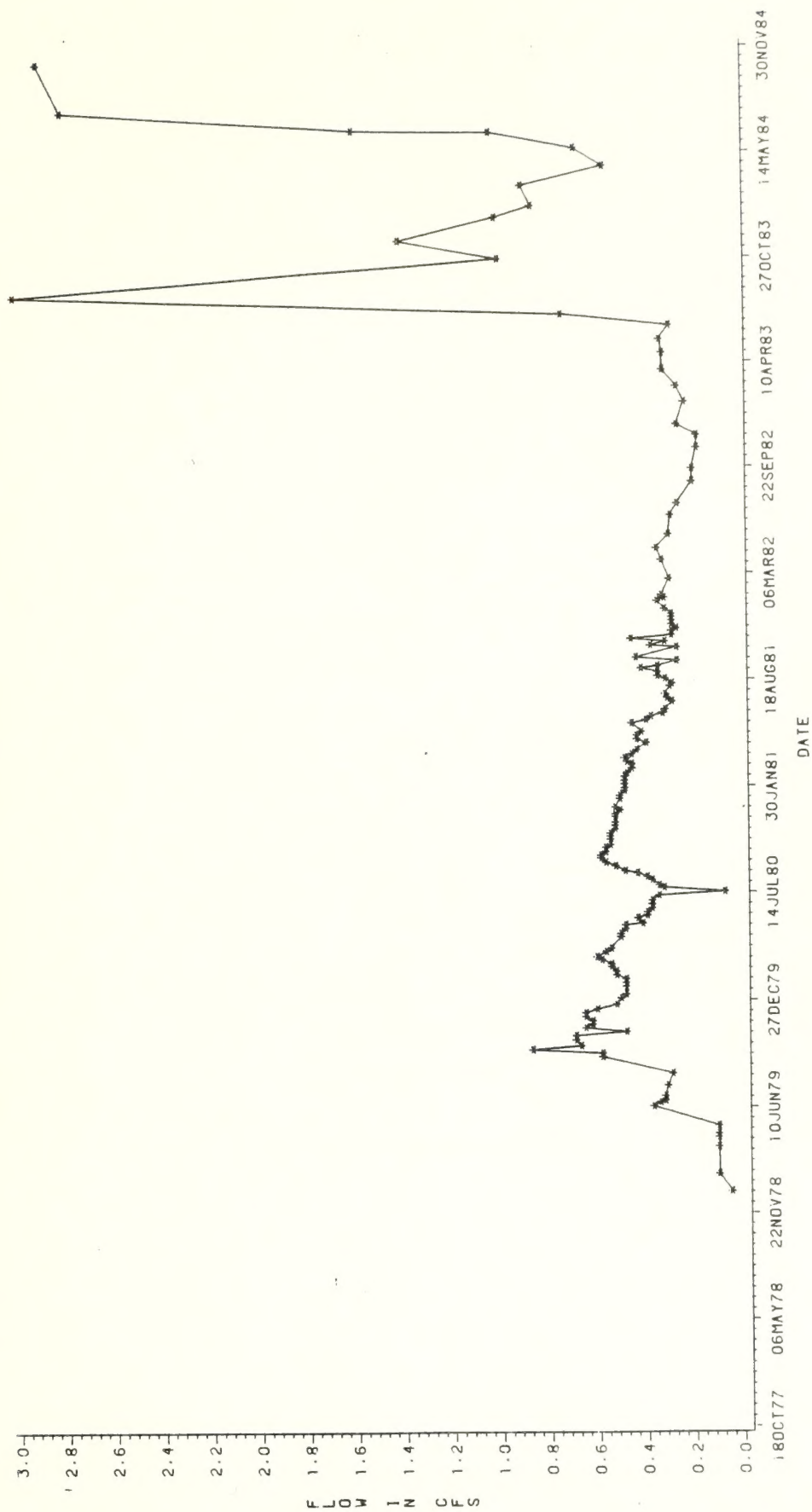
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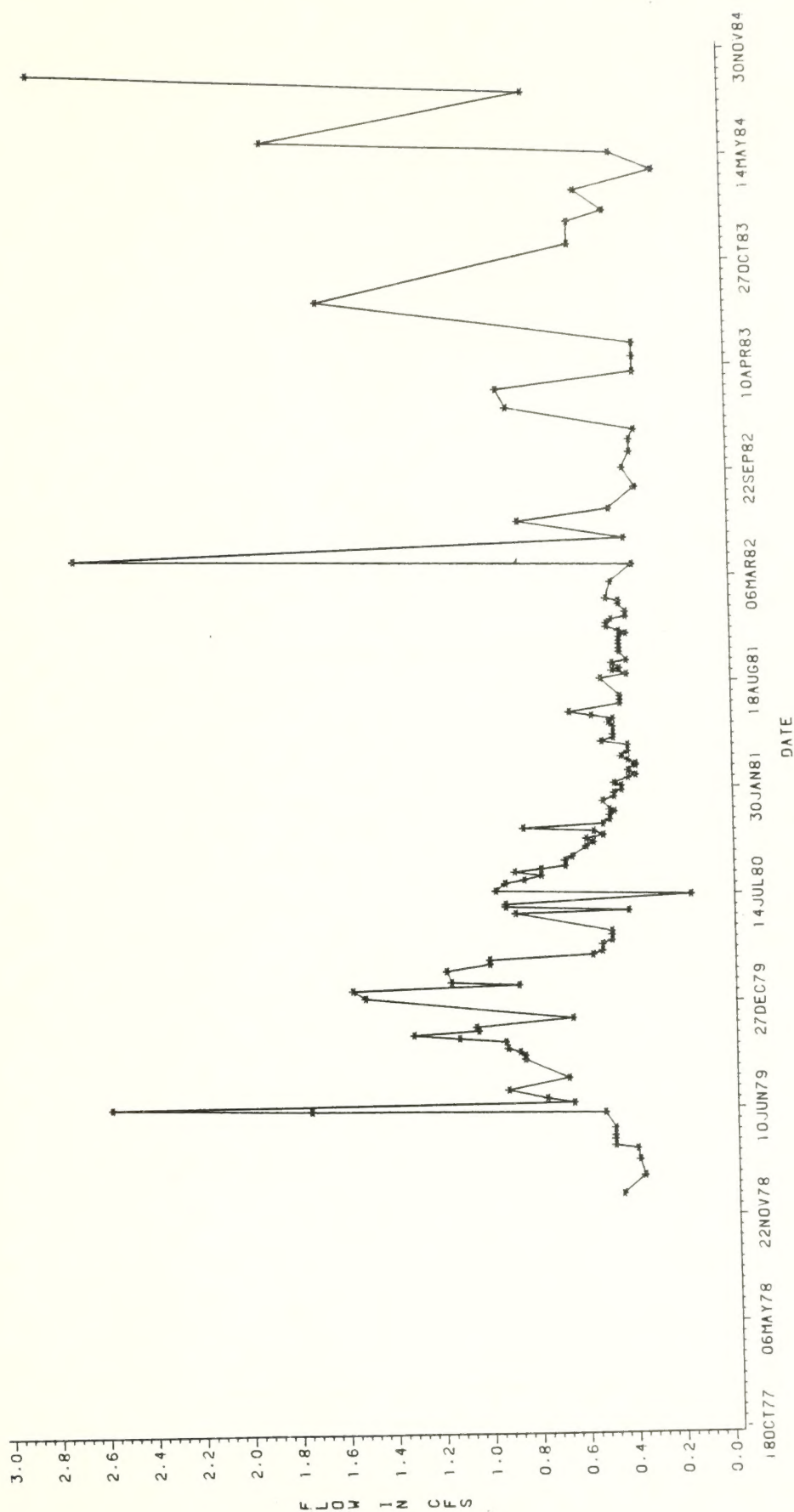
24335 GMA EDWARDS NOT TOLD 230000 UNIT

TIME SERIES PLOT FOR SPRINGS AND SEEPS LOC=WS04



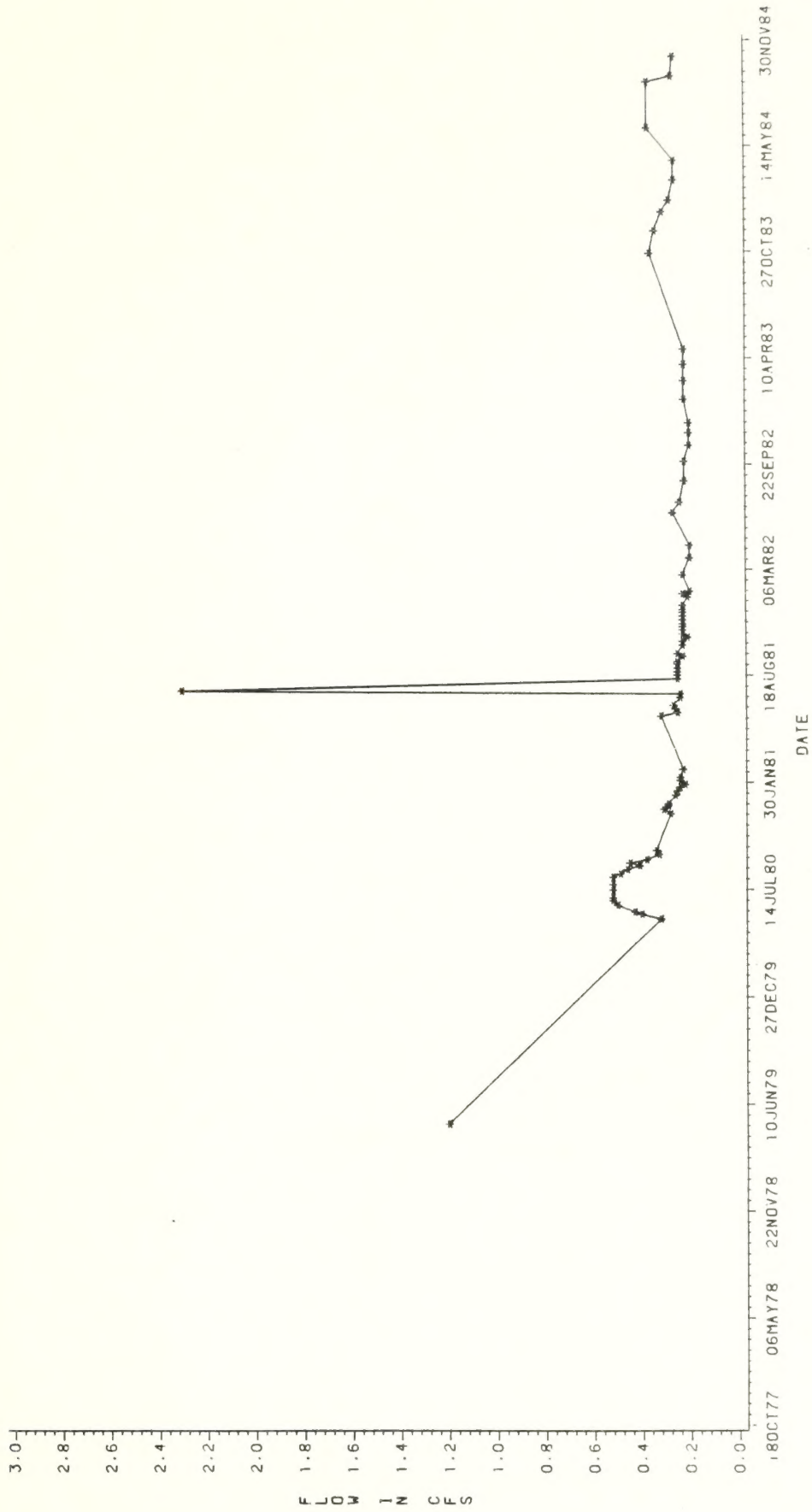
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TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS07

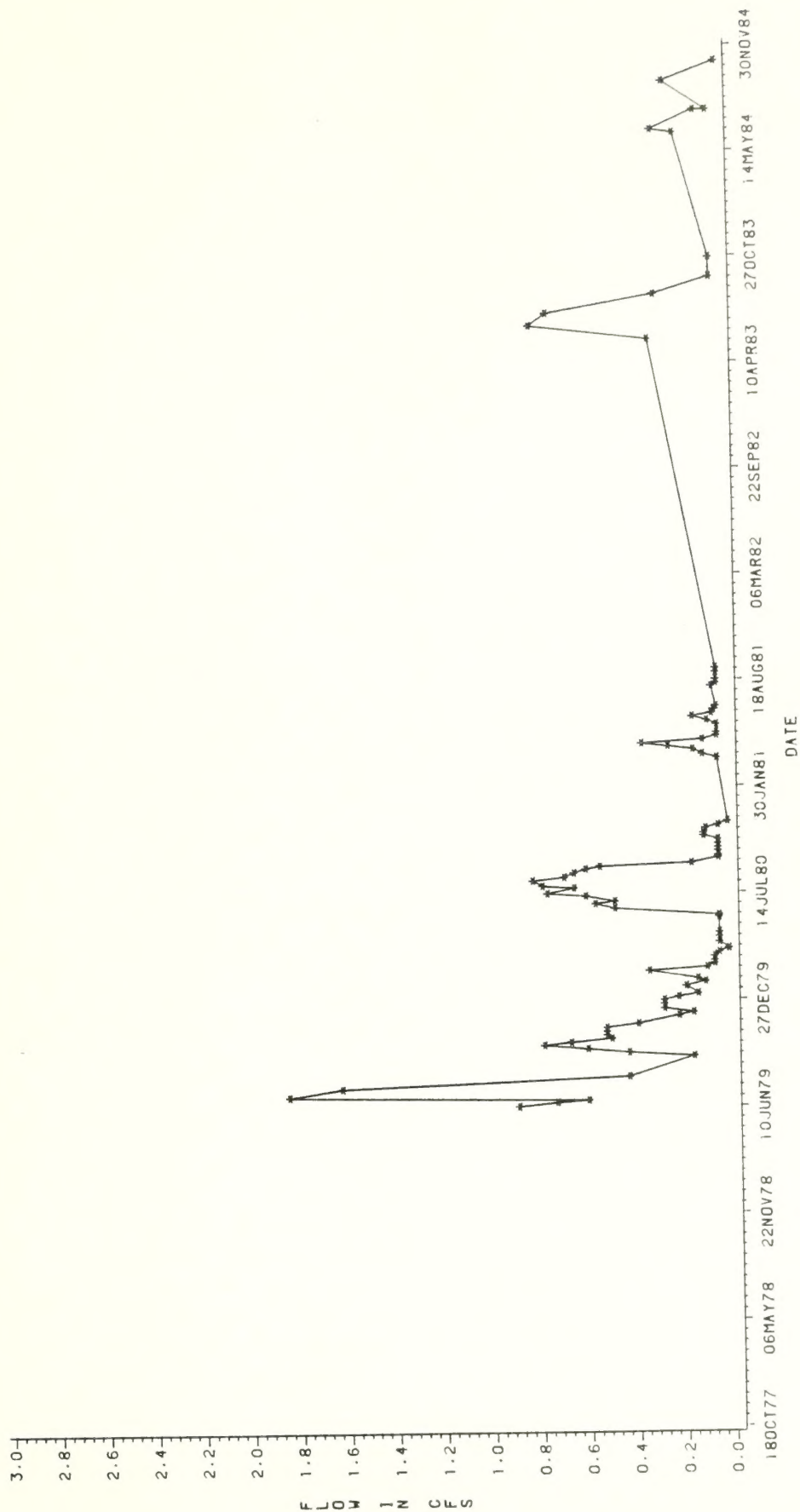




LINE SERIES: BROU, LOW, BUSHING, AND ZELBA

TIME SERIES PLOT FOR SPRINGS AND SEEPS

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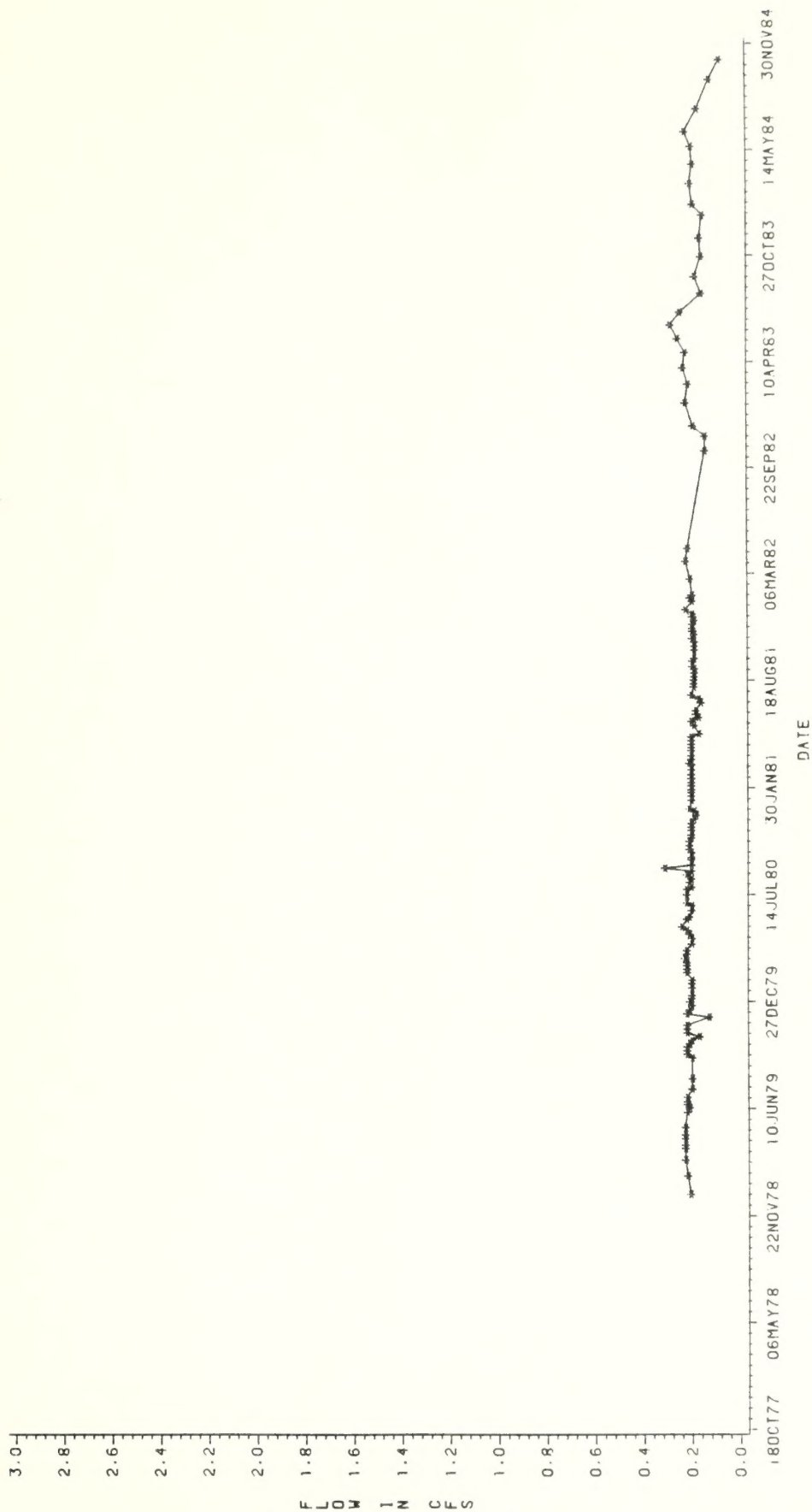


2015-2016 BOWLING HIGH TOWN COUNCIL DATA



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS09



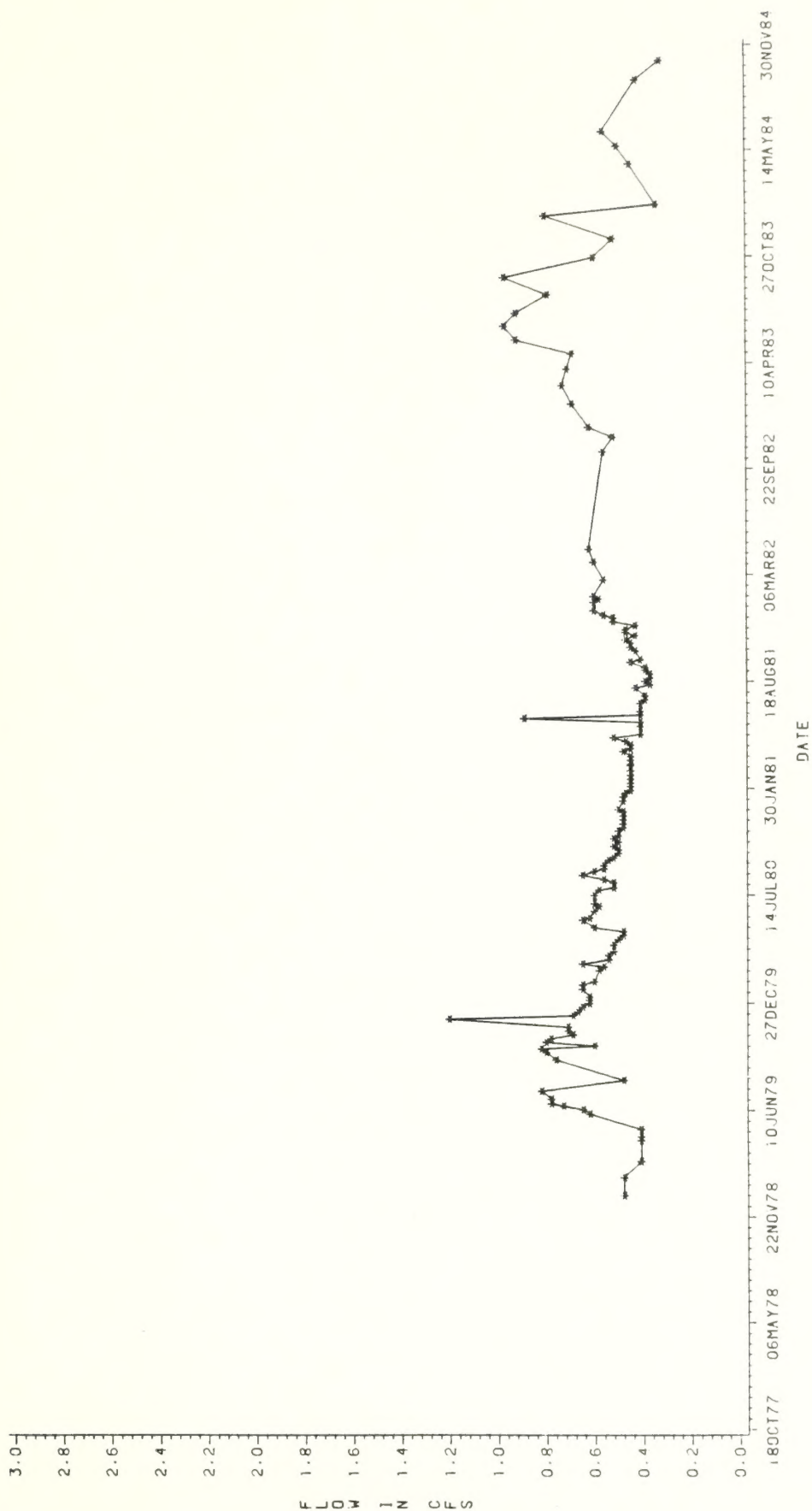
2714



TIME SERIES PLOT FOR SIGNALS AND SENSORS

TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS10





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TIME SERIES PLOT FOR SPRINGS AND SEEPS

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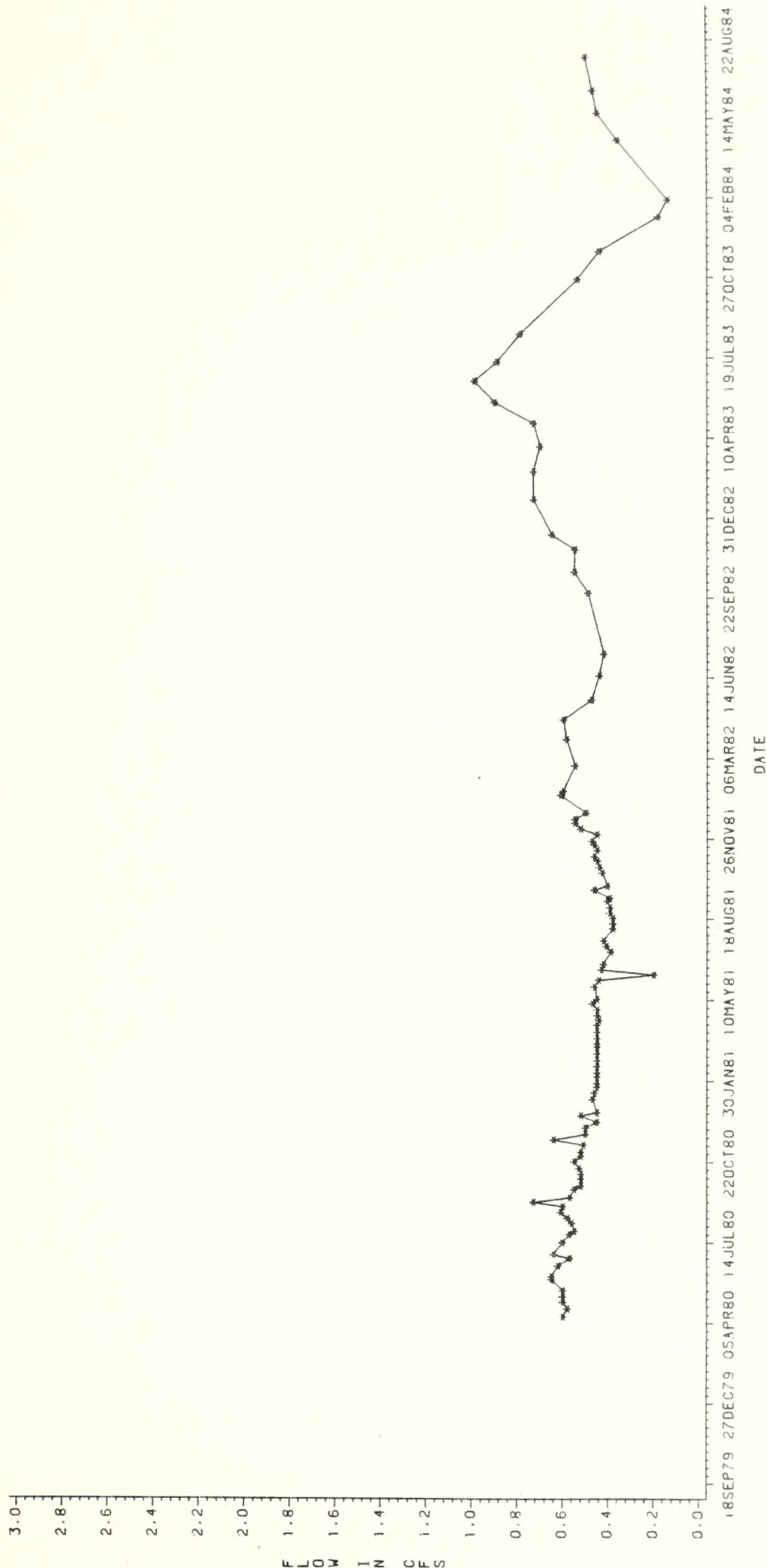


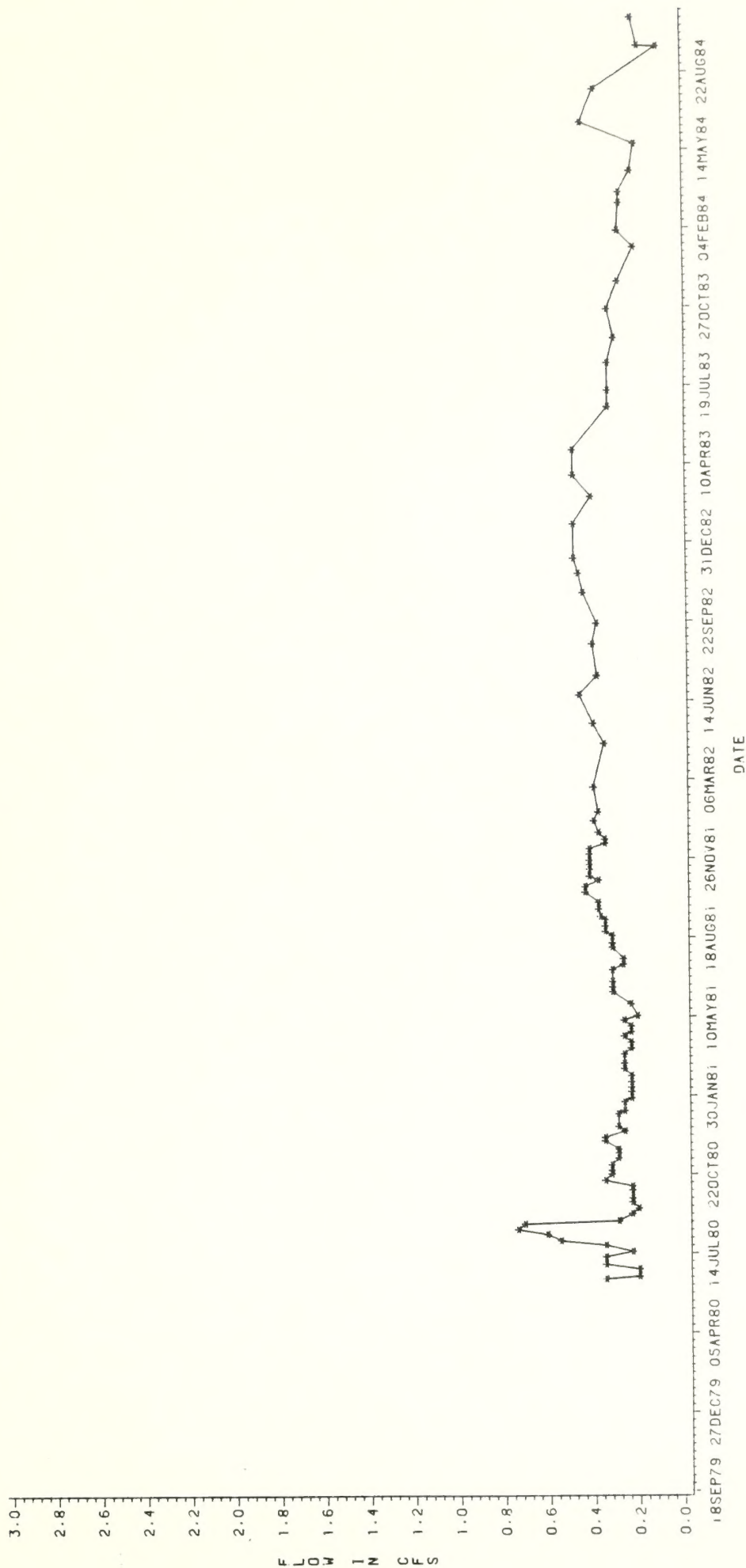
Fig. 1



THE SIGNALS FOR THE TWO CHANNELS

TIME SERIES PLOT FOR SPRINGS AND SEEPS

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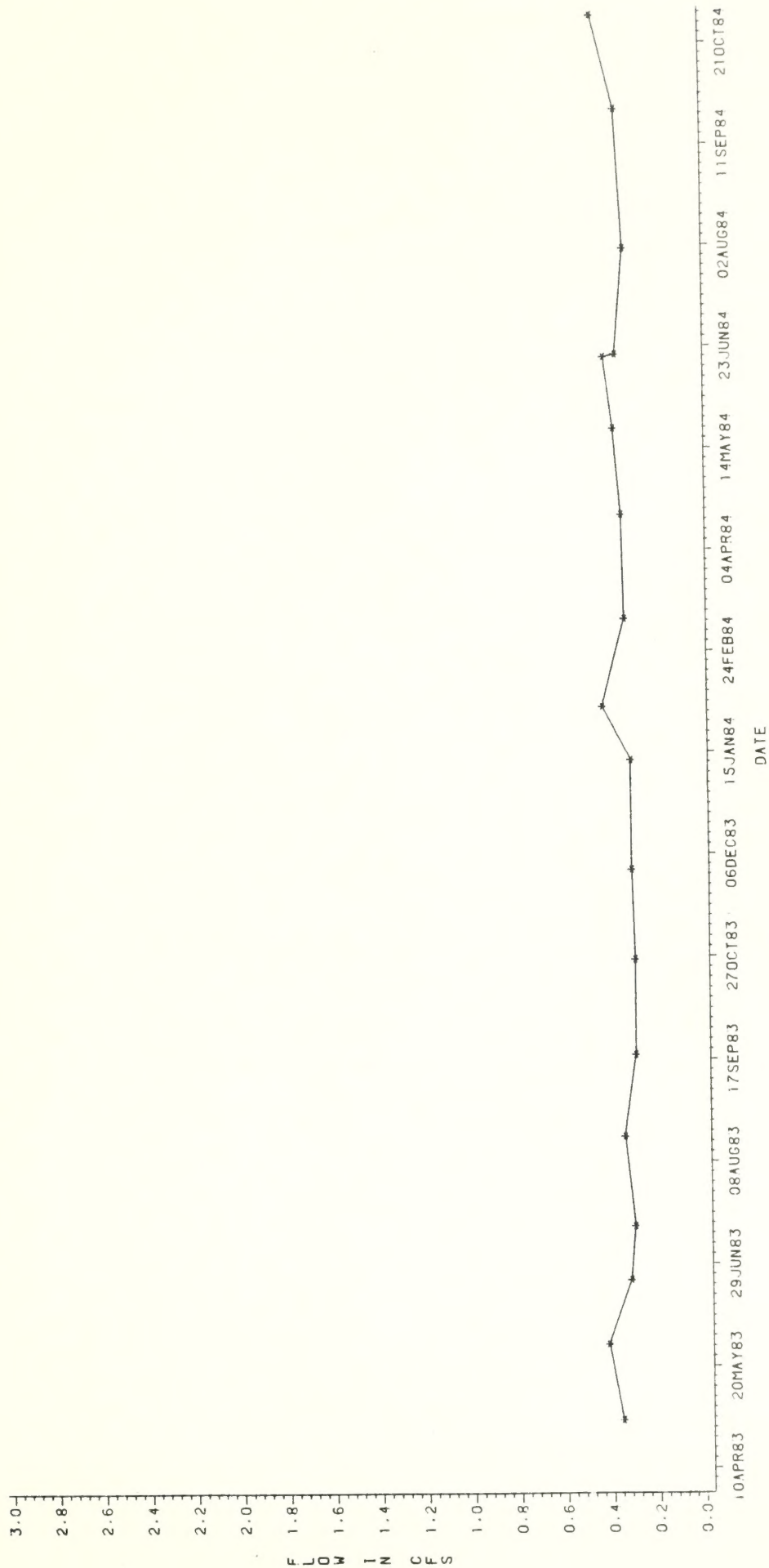




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TIME SERIES PLOT FOR SPRINGS AND SEEPS

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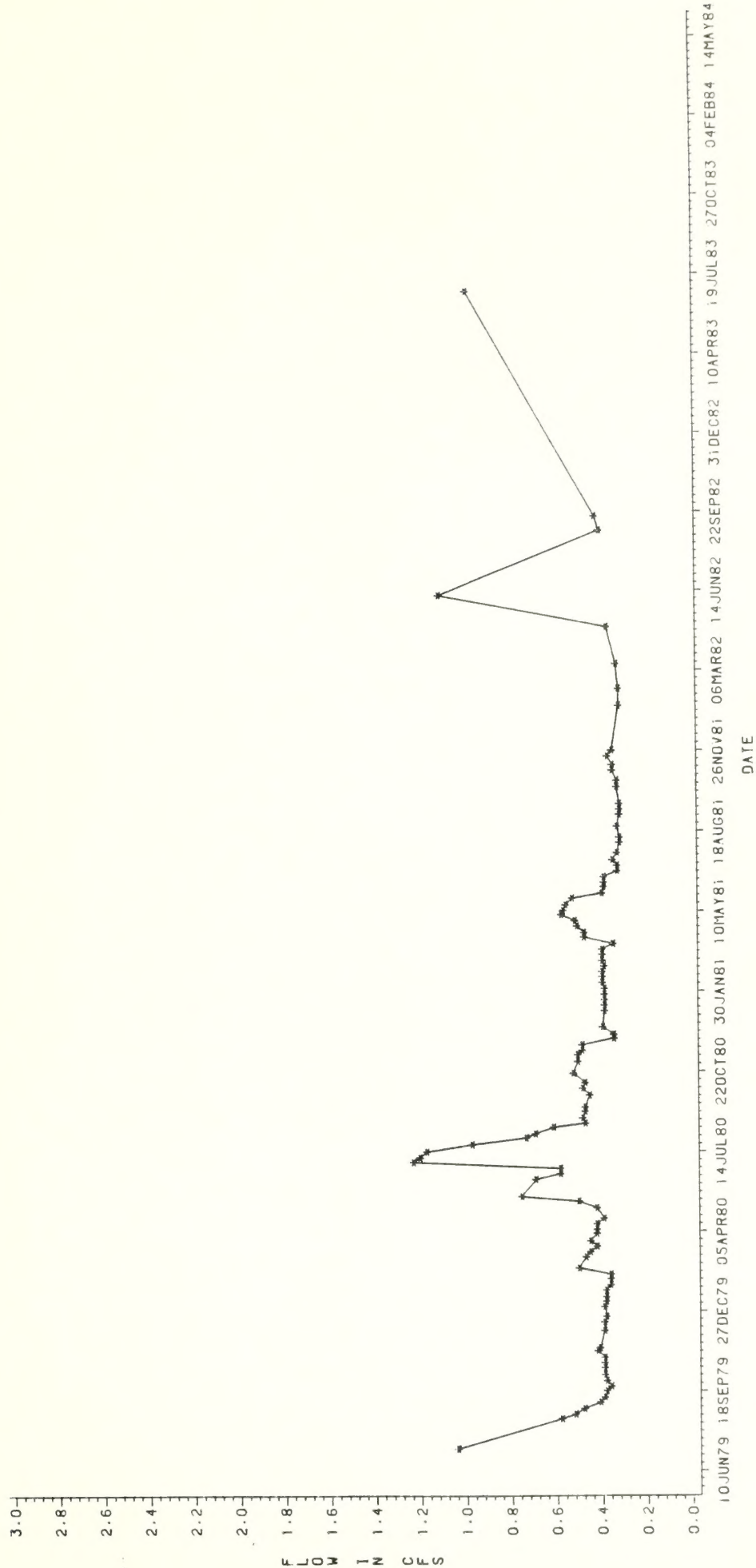




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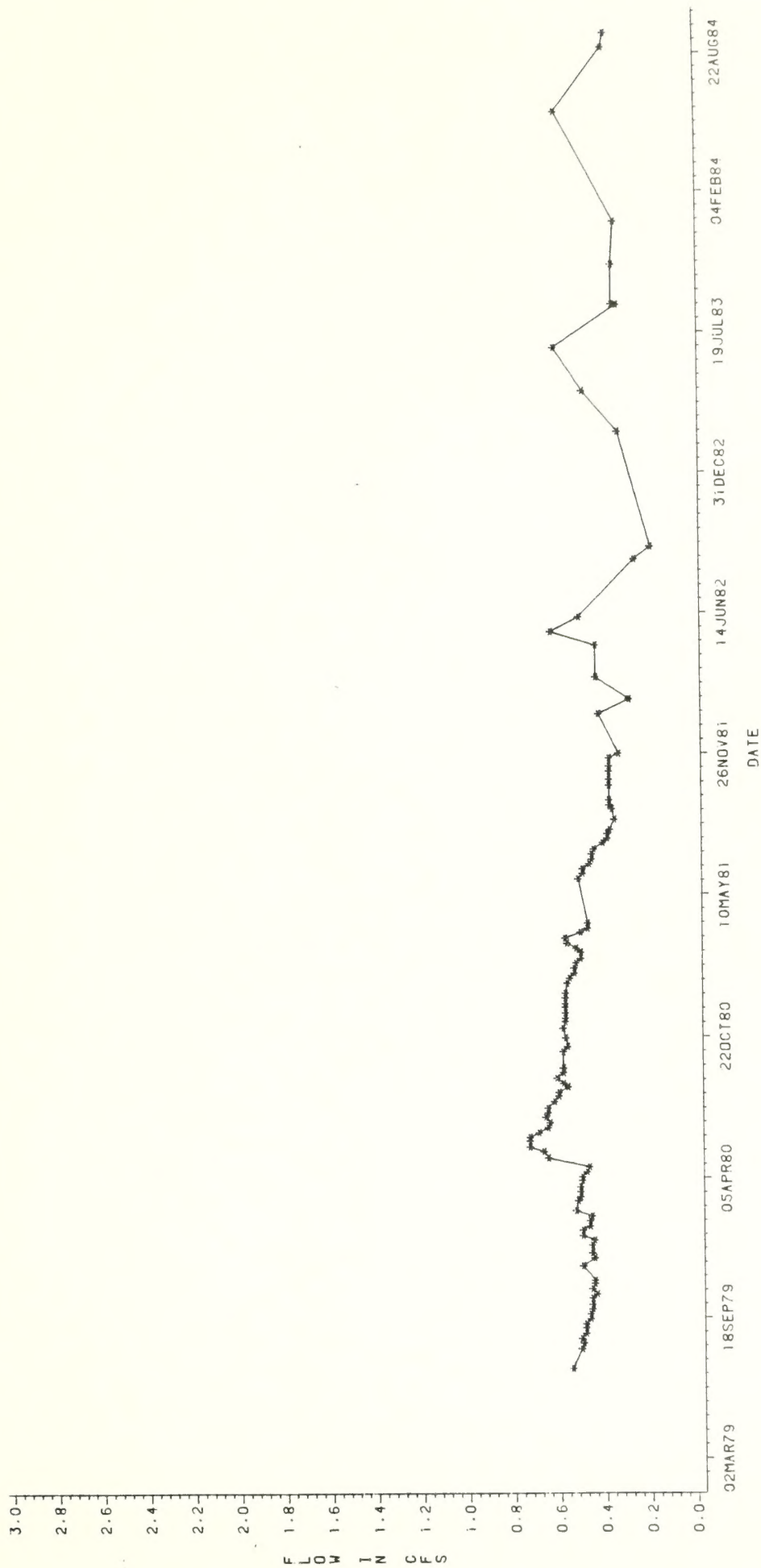




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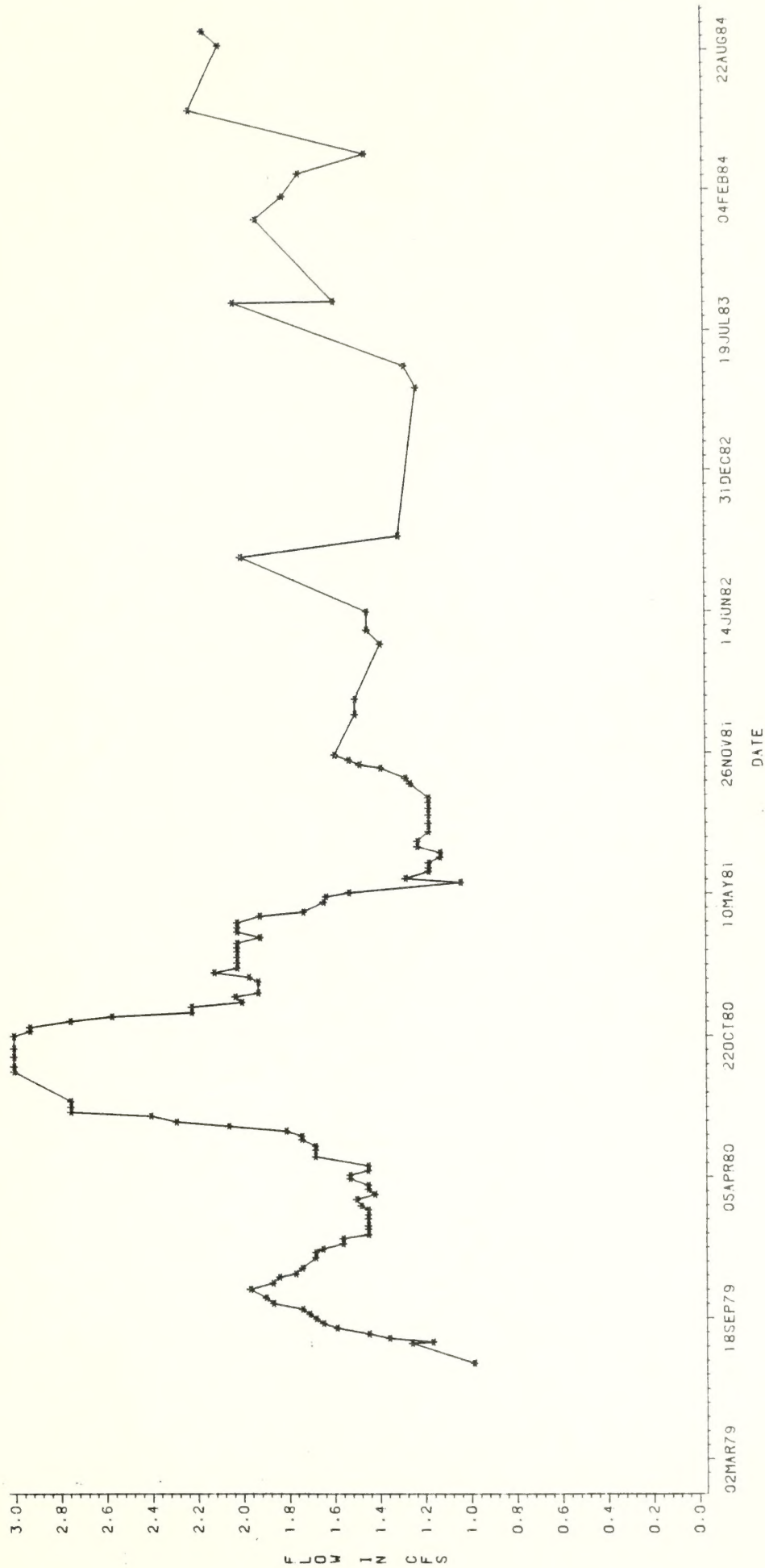
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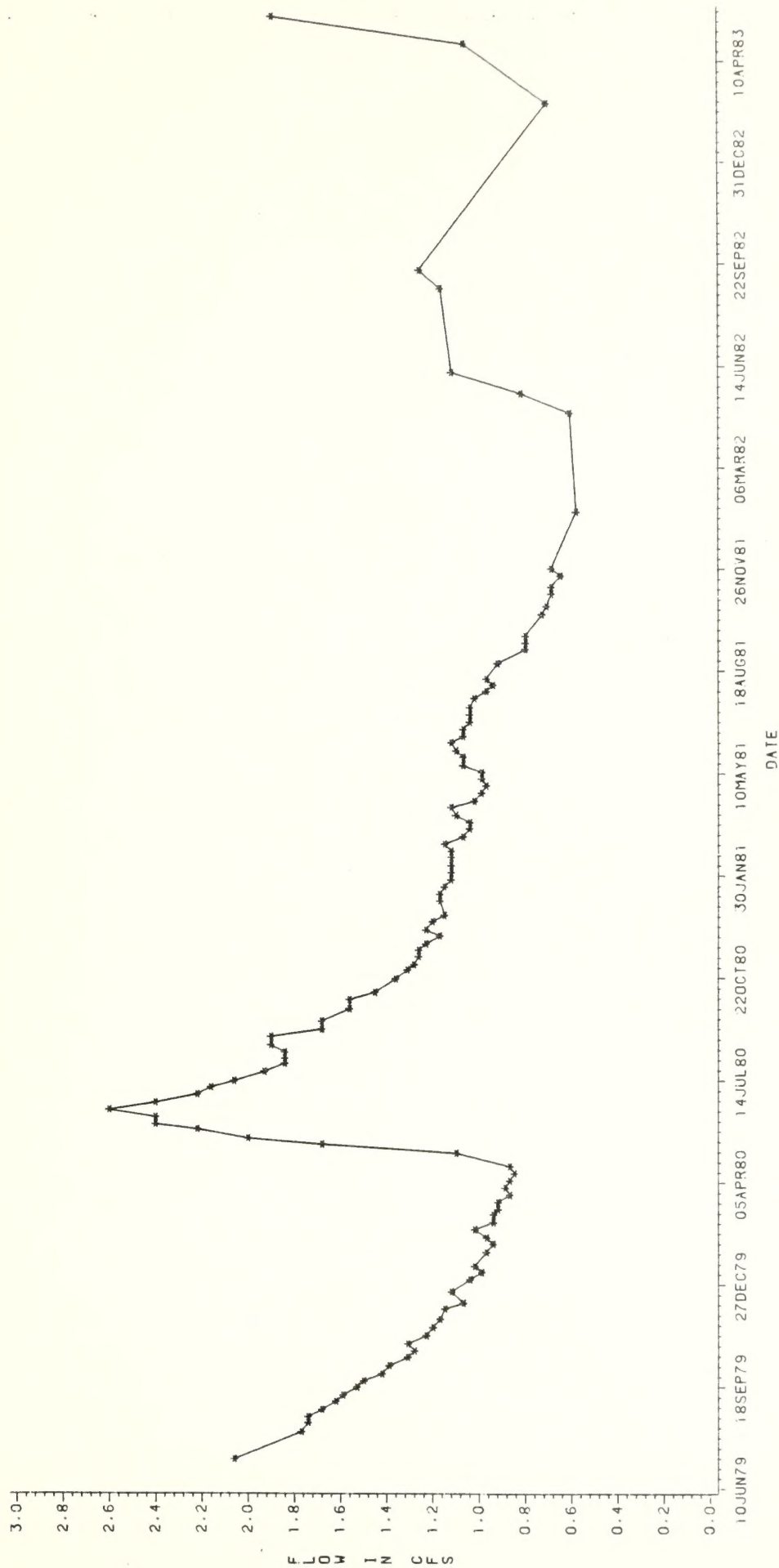


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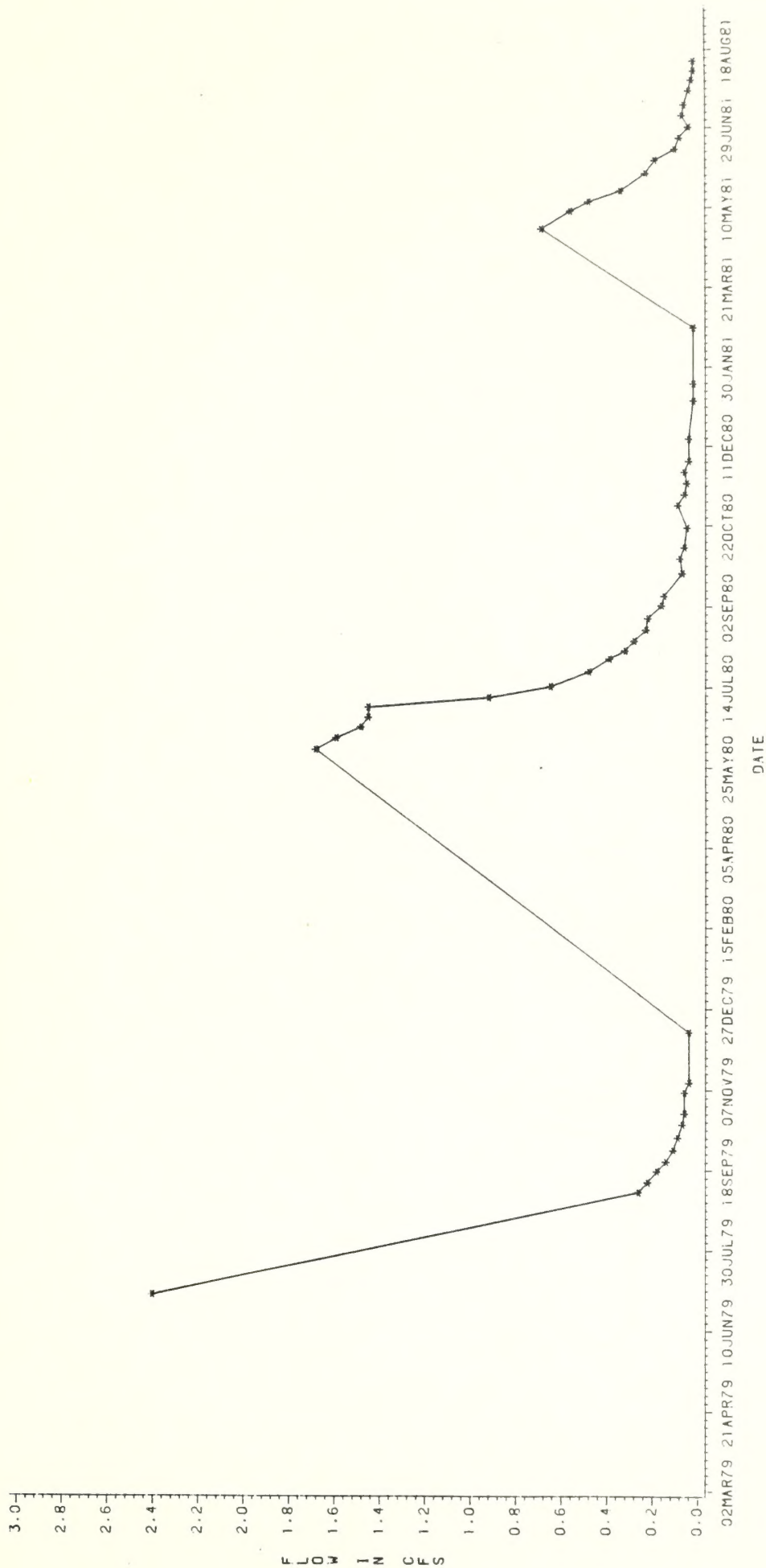


TIME SERIES PLOT FOR SPRINGS AND SEEPS LOC=WS24



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS2S



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS26



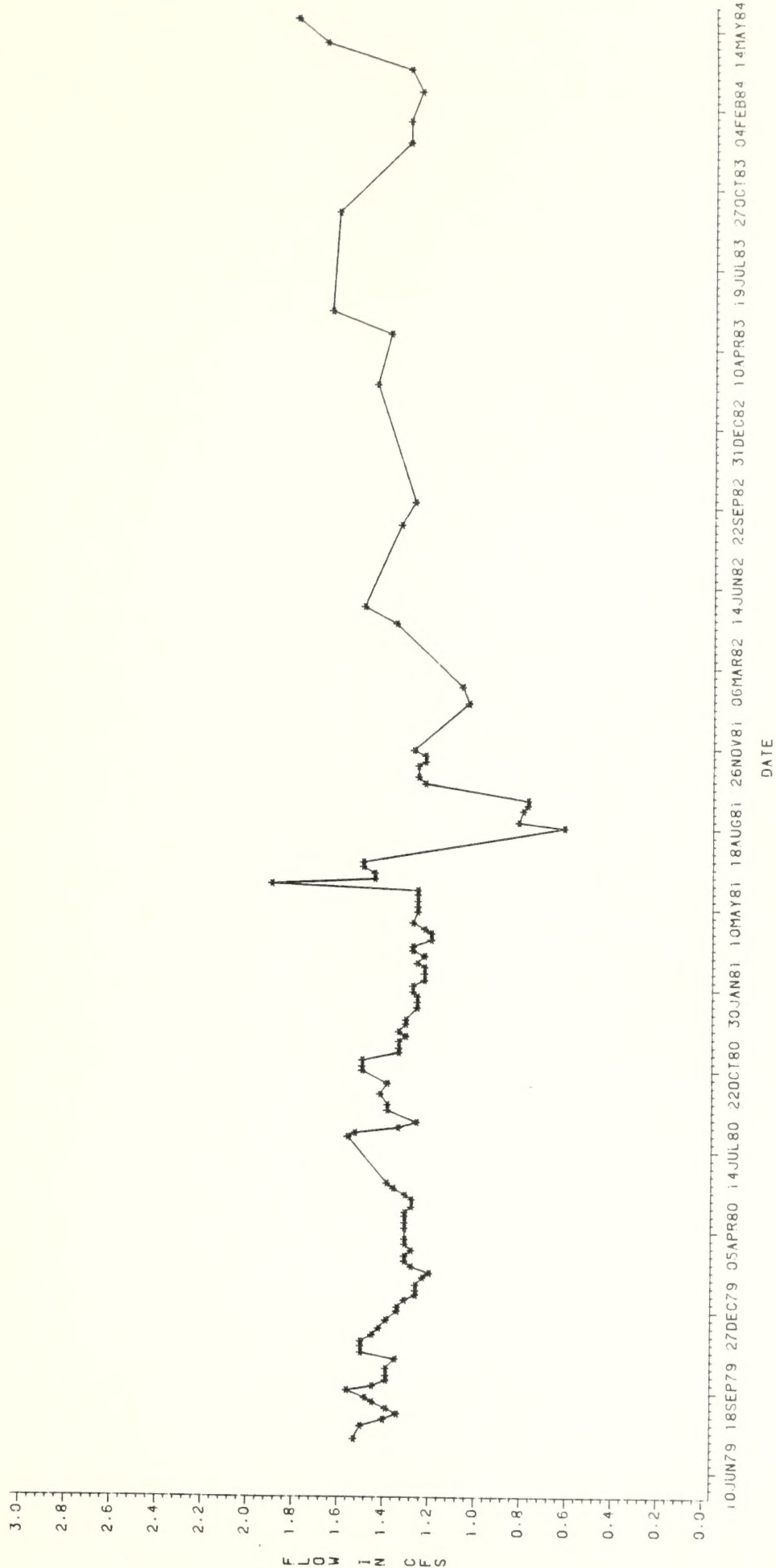
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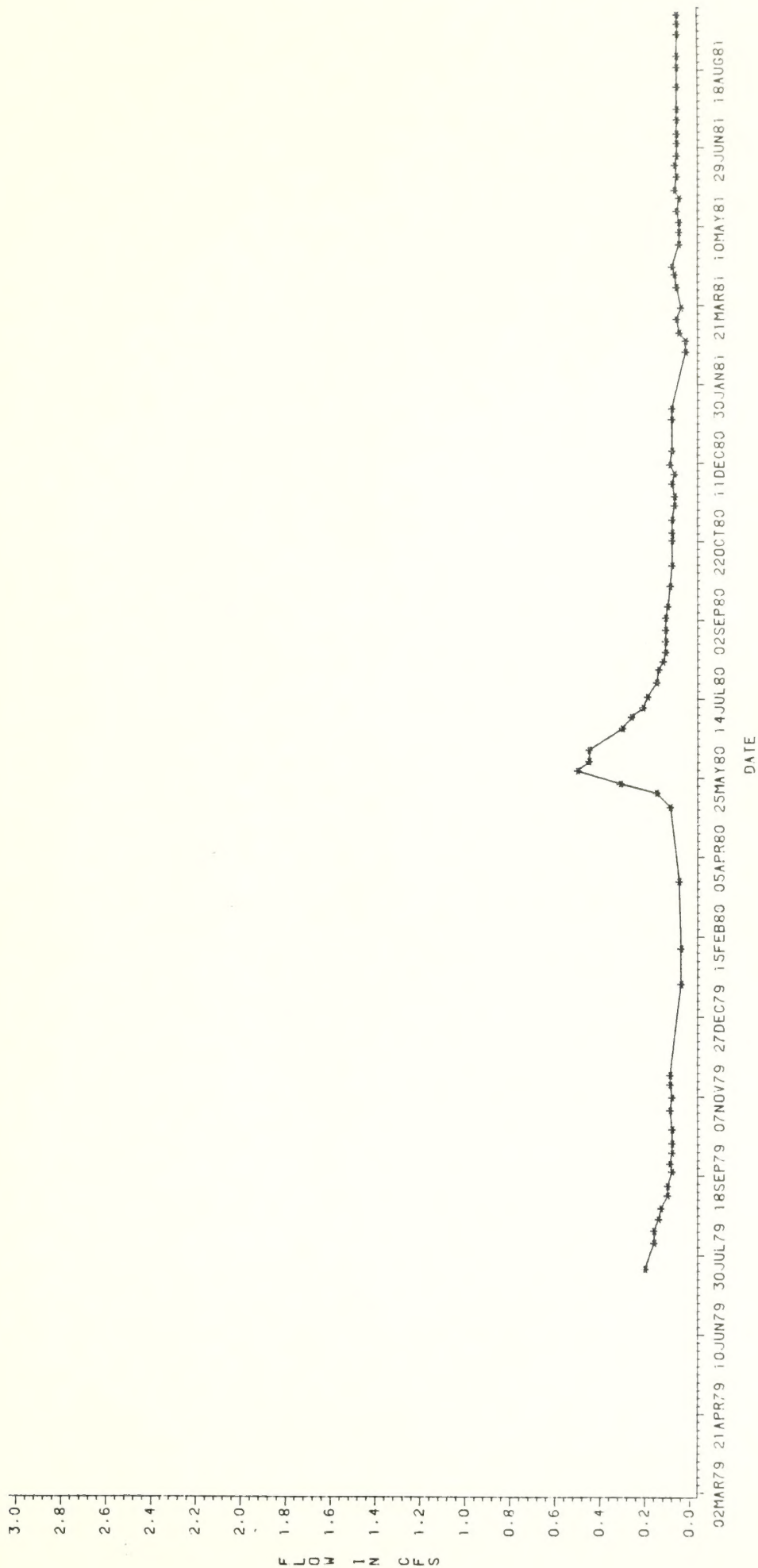
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS28



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS29



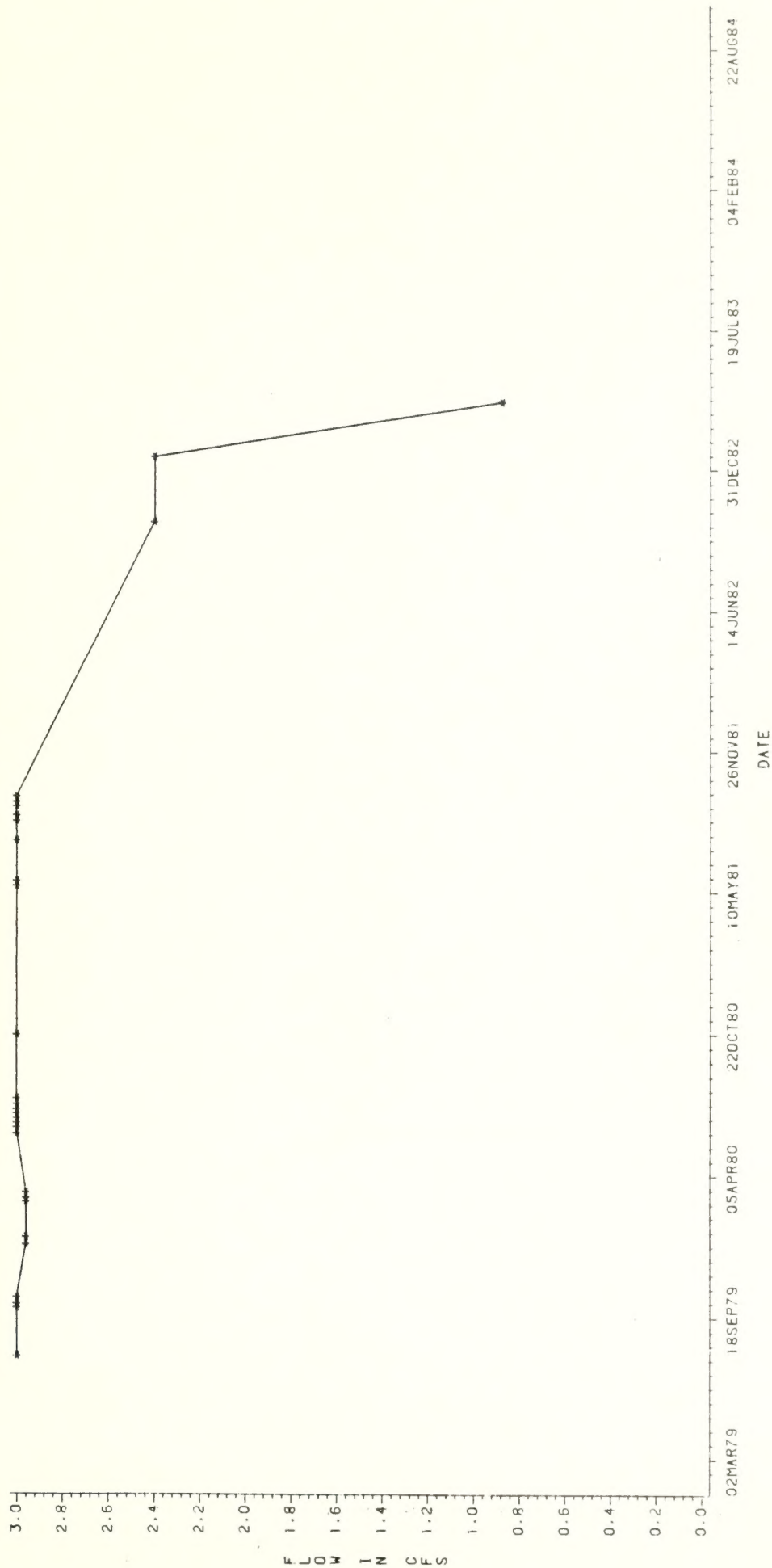
1940



TIME SERIES LEVEL FOR SERIES AND SERIES

TIME SERIES PLOT FOR SPRINGS AND SEEPS

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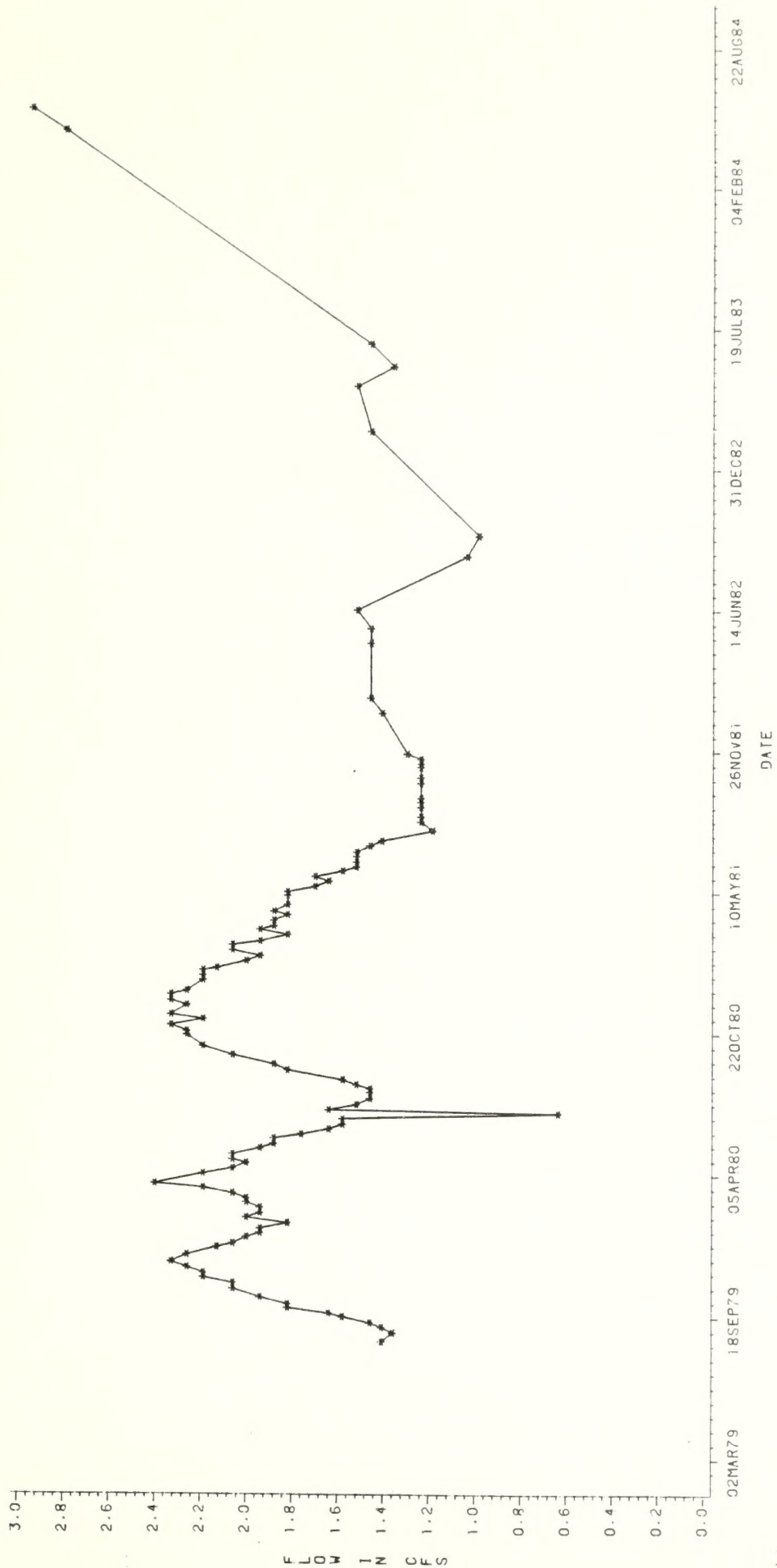




THE SERIES OF THE BUREAU OF THE BUREAU

TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS31



DATE: 10/10/68 TIME: 10:00 AM



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS32

3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0

F L O W I N C F S



02MAR79 21APR79 10JUN79 30JUL79 18SEP79 07NOV79 27DEC79 15FEB80 05APR80 25MAY80 14JUL80 02SEP80 22OCT80 11DEC80 30JAN81 21MAR81 10MAY81 29JUN81 18AUG81

DATE

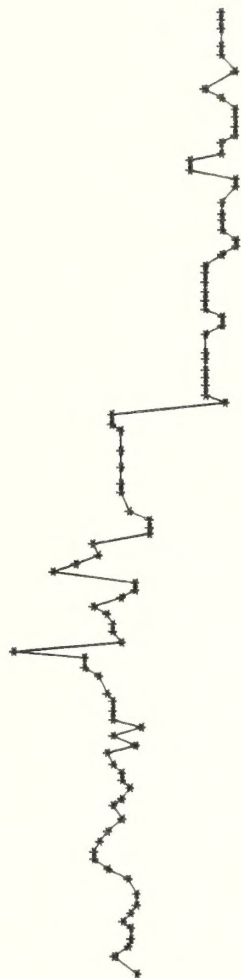
LINE SERIES APTOL FOR 24HOURS AND 24HOURS

TIME SERIES PLOT FOR SPRINGS AND SEEPS

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2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0

F L O W I N C F S



10JUN79 18SEP79 27DEC79 05APR80 14JUL80 22OCT80 30JAN81 10MAY81 18AUG81 26NOV81 06MAR82 14JUN82 22SEP82 31DEC82 10APR83

DATE

1941

1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100



TIME SERIES 1941-1984

TIME SERIES PLOT FOR SPRINGS AND SEEPS

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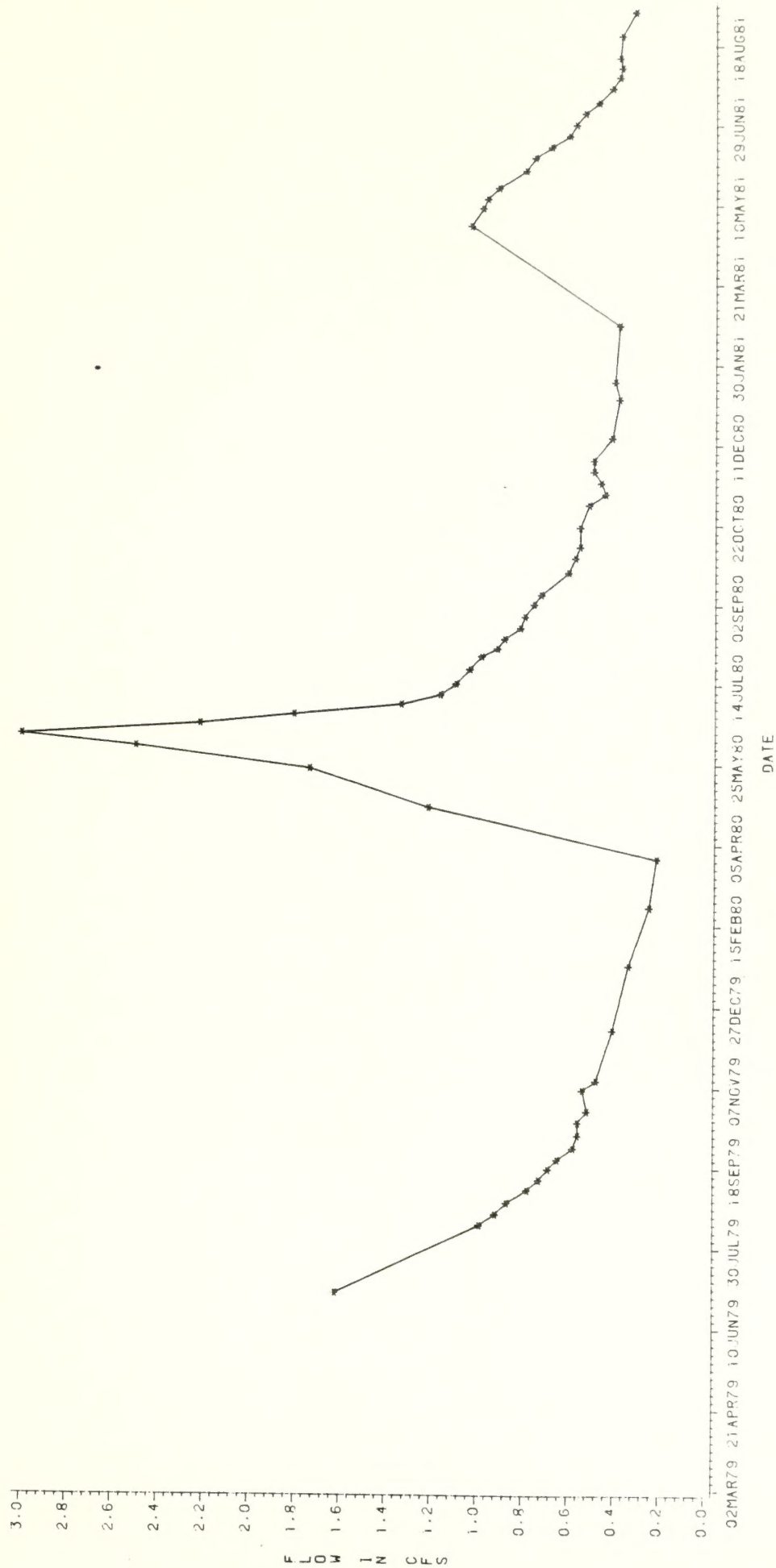


THE RESEARCH FOR THE 2012



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS3S



1948

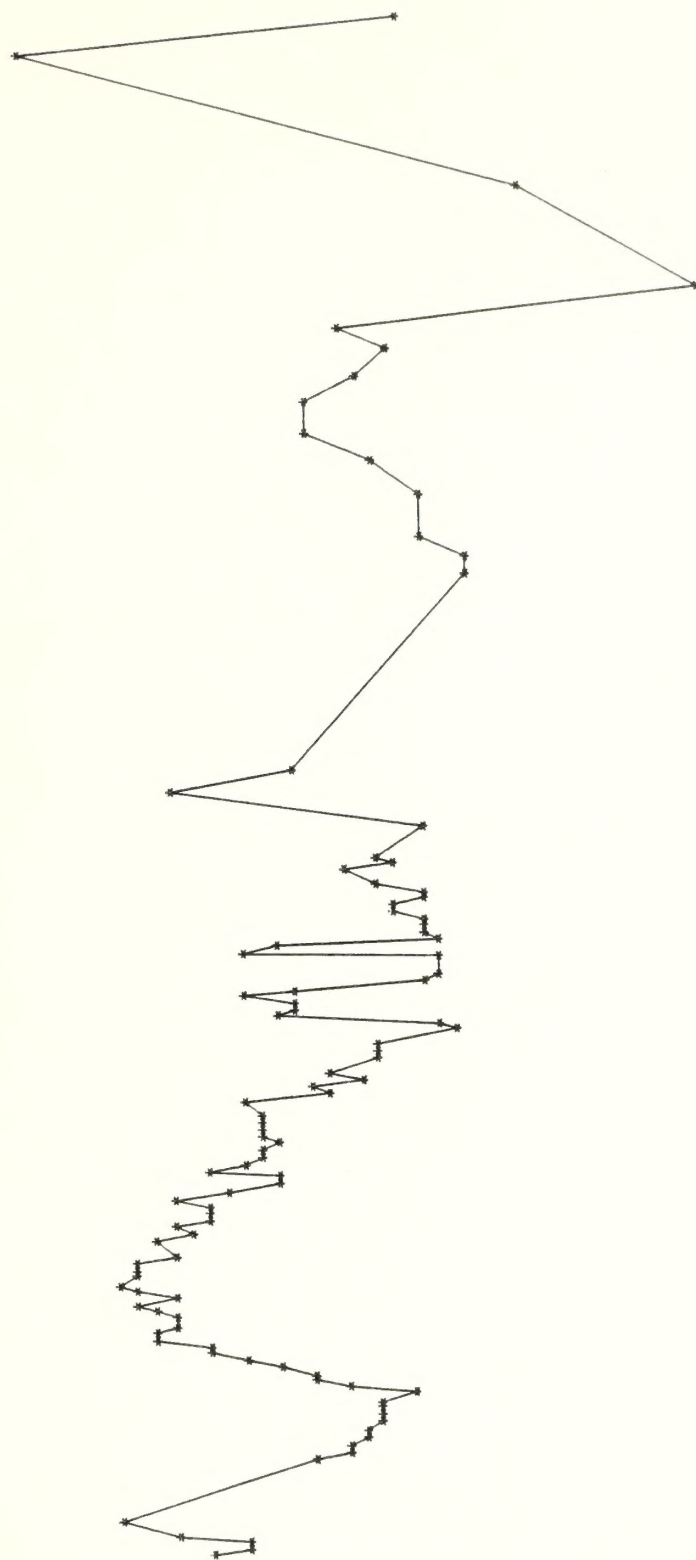


LINE GRAPH FOR 1948 AND 1949

TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS36

FLOW IN CES



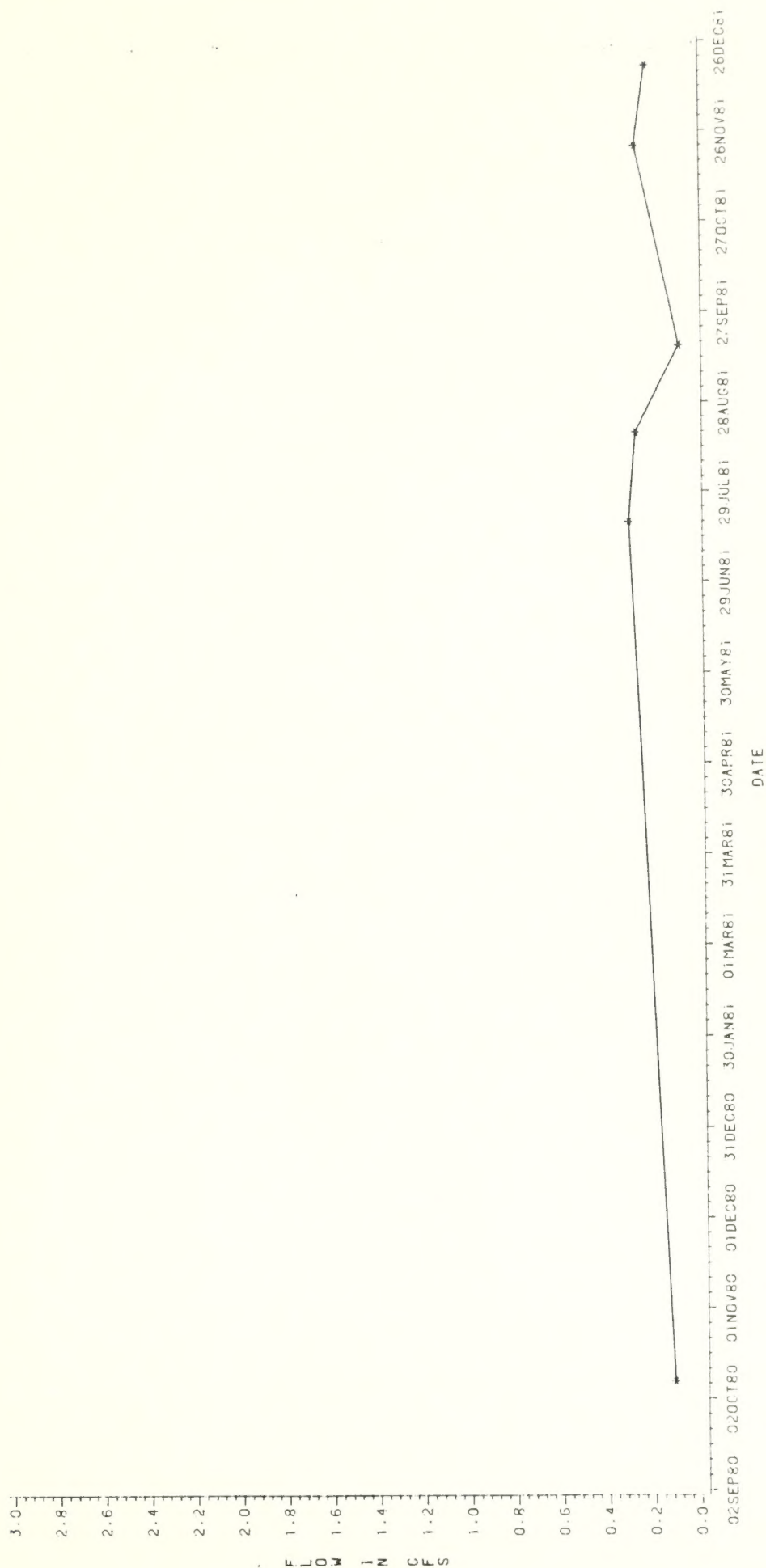
DATE

THE SERIES FOR 405 GLENNES AND 2012



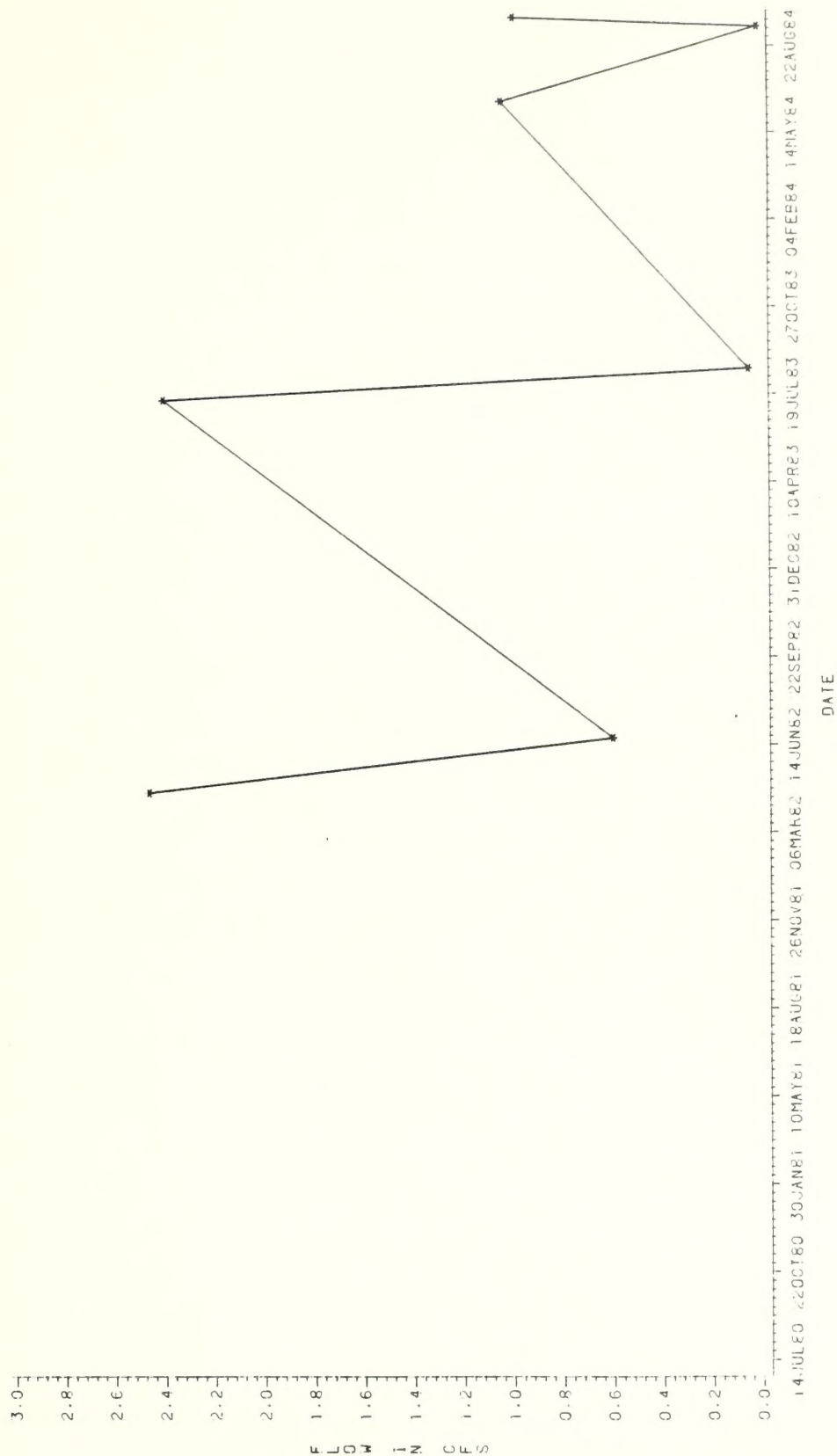
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS37



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS66



THE STATE OF TEXAS FOR 1909



1.2.1.3 Alluvial Wells

Alluvial wells are located on and near C-b Tract; these wells are shown in Figure 1.2.1.3-1.

Monitoring of alluvial wells was begun during the baseline period and has continued through C-b Tract's Developmental Monitoring Program, which ended March 1982. Approval of the Interim Monitoring Program (IMP) was granted by the OSPD for the period, April 1983 through 1984.

Data reported in this section are for the Interim Monitoring Program (IMP).

Water levels and field measurements were sampled monthly for all alluvials except dry holes during the DMP. Water levels sampling frequency remains unchanged during the IMP. Field measurements (temperature, pH and conductivity) are to be sampled semiannually unless a maximum or minimum greater than 20% deviation from baseline values occurs for pH or conductivity; then an additional water quality sample must be taken and analyzed. See Table 1.2-1 for station list and associated sampling frequency.

Table 1.2.1.3-1 presents water level and field measurement data for June through November 1984 for all alluvial wells. Wells WA04, WA10, and WA13 are dry; therefore, no data are presented for them.

Time series plots of alluvial well levels are presented in this section; for reference see Table 1.2.1.3-2.

Stevens Recorder instrumentation for monitoring continuous water levels were operating at ten alluvial wells during the Development Monitoring Program (DMP); these recorders were removed upon approval of the OSPD for the Interim Monitoring Program (IMP).

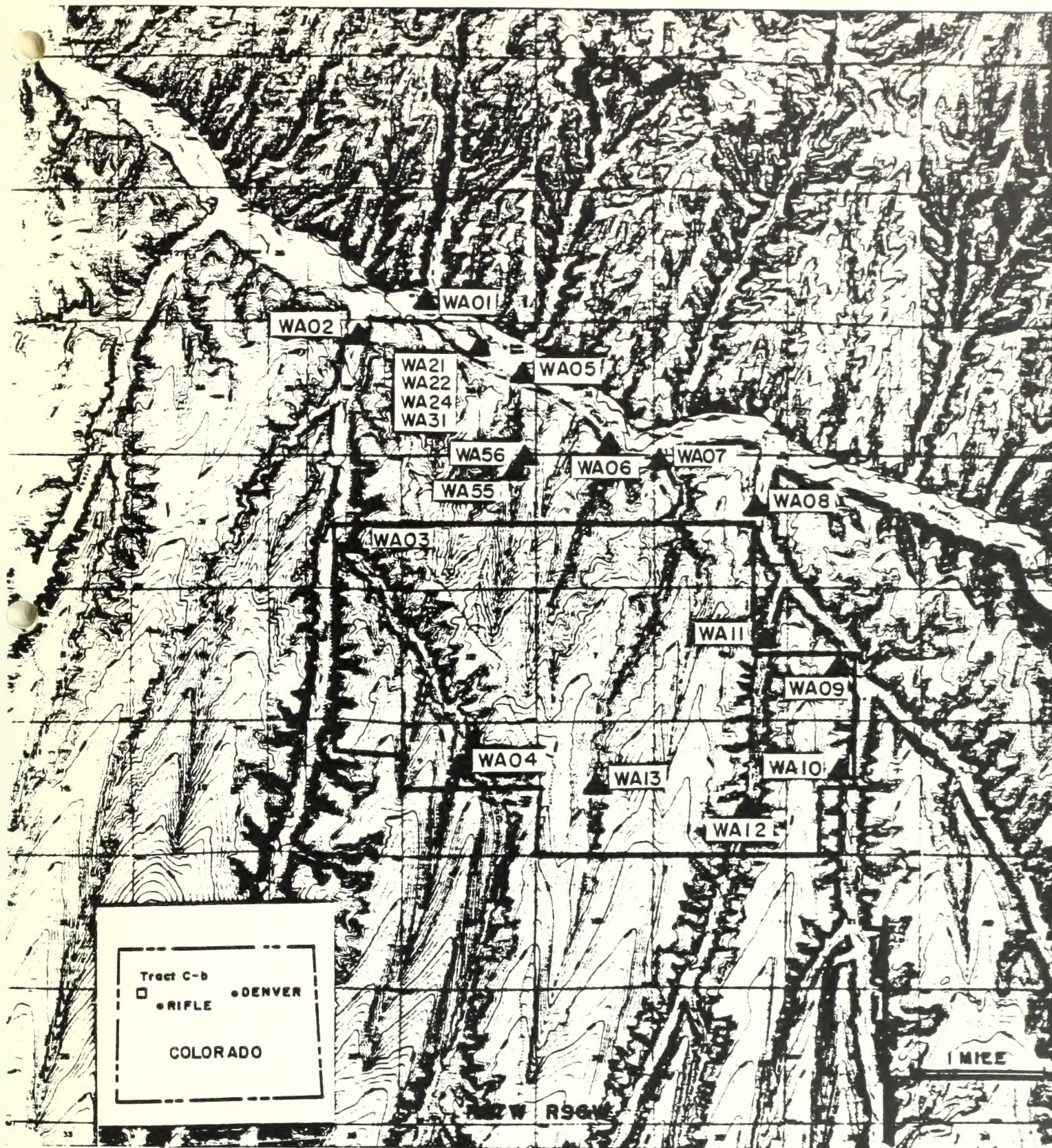


FIGURE 1.2.1.3-1 ALLUVIAL AQUIFER
MONITORING NETWORK

TABLE 1.2.1.3-1
CB-TRACT
WATER LEVELS AND FIELD MEASUREMENTS
ALLUVIAL WELLS
FOR SAMPLE DATE SHOWN

WELL	YR	MO	DY	ST	DEPTH (FT)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)
----	--	--	--	--	-----	-----	---	-----	-----
WA01	84	6	12		6238.9				
		7	24		6243.2				
		8	31		6240.3				
		9	26		6239.1				
		10	29		6239.1				
		11	29		6238.2	10.0	8.6		1400.0
WA02	84	6	12		6273.2				
		7	31		6276.5				
		8	31		6274.5				
		9	27		6273.4				
		10	29		6273.6				
		11	29		6271.9	10.0	8.3		1140.0
WA03	84	6	12		6370.3				
		7	31		6373.6				
		8	31		6369.0				
		9	27		6373.3				
		10	29		6374.0				
		11	29		6372.6	10.0	8.0		1230.0
WA05	84	6	14		6329.3				
		7	25		6328.1				
		8	29		6326.9				
		9	26		6327.9				
		10	29		6327.4				
		11	29		6327.5	11.0	8.0		1210.0
WA06	84	6	18		6329.9				
		7	23		6335.9				
		8	31		6327.9				
		9	26		6326.2				
		10	29		6328.4				
		11	30		6325.0	8.0	7.9		1200.0
WA07	84	6	18		6356.9				
		7	23		6360.8				
		8	29		6354.2				

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSIBLE

TABLE 1.2.1.3-1 (Cont'd)
CB-TRACT
WATER LEVELS AND FIELD MEASUREMENTS
ALLUVIAL WELLS
FOR SAMPLE DATE SHOWN

WELL	YR	MO	DY	ST	DEPTH (FT)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)
----	--	--	--	--	-----	-----	---	-----	-----
WA07	84	9	26		6352.9				.0
		10	29		6352.2				.0
		11	30		6352.1	8.0	8.1		1030.0
WA08	84	6	14		6387.7				
		7	23		6389.0				
		8	29		6389.8				
		9	27		6386.3				
		10	30		6387.9				
		11	30		6387.0	9.0	8.0		1120.0
WA09	84	6	14		6495.3				
		7	23		6496.5				
		8	29		6497.7				
		9	27		6497.1				
		10	30		6495.2				
		11	30		6496.3	8.0	8.1		1150.0
WA11	84	6	14		6451.5				
		7	19		6451.7				
		8	29		6451.4				
		9	27		6450.9				
		10	30		6451.1				
		11	30		6449.0	8.0	8.2		1200.0
WA12	84	6	14		6643.8				
		7	19		6642.2				
		8	29		6641.6				
		9	27		6640.9				
		10	30		6641.9				
		11	30		6644.0	8.0	8.0		1540.0
WA21	84	6	21	FLWING	6292.0	9.0	7.5		1450.0
WA22	84	6	21		6286.4	9.0	7.5		1350.0
WA24	84	6	21		6284.0	9.0	7.4		1350.0

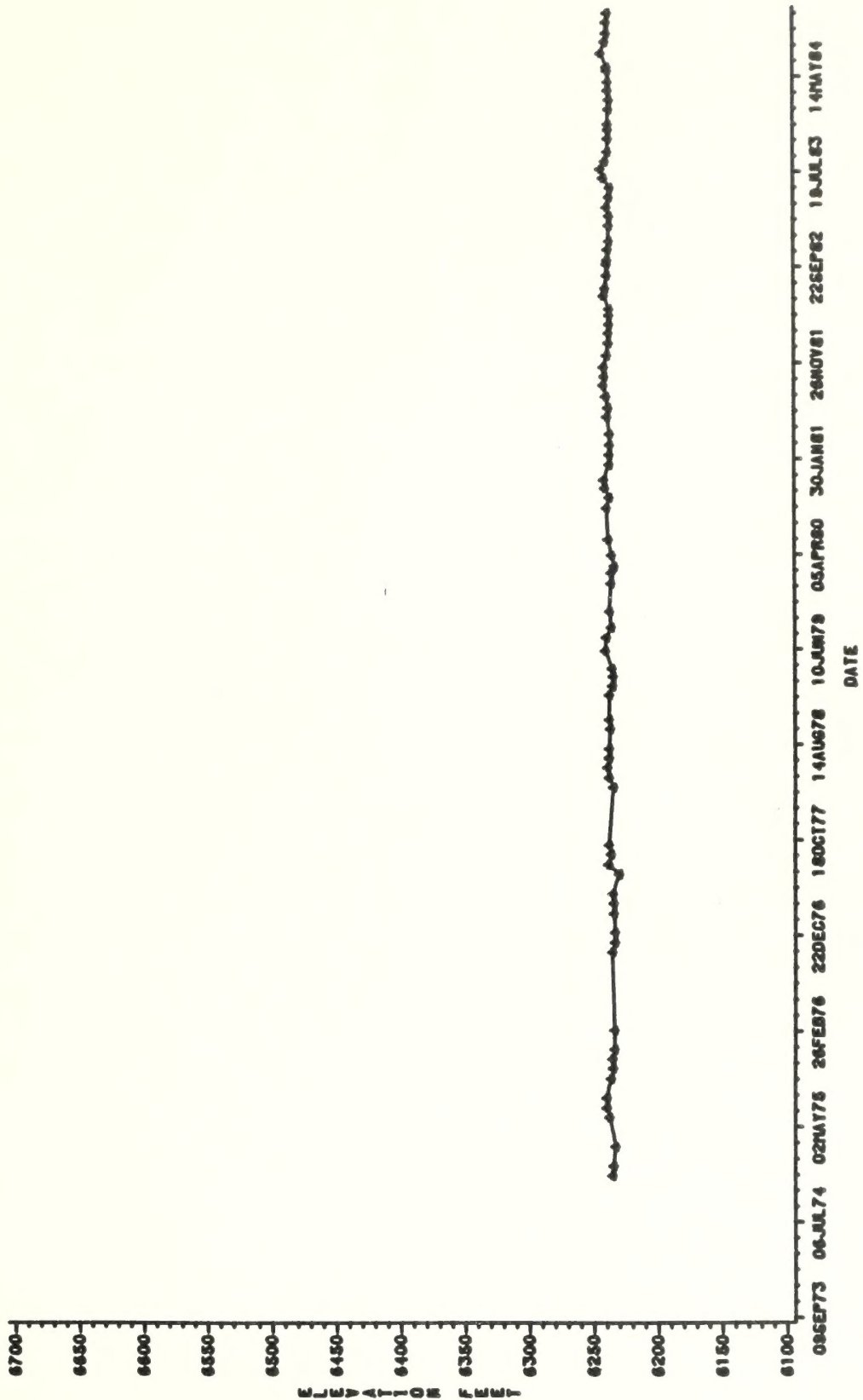
PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSIBLE

TABLE 1.2.1.3-1 (Cont'd)
 CB-TRACT
 WATER LEVELS AND FIELD MEASUREMENTS
 ALLUVIAL WELLS
 FOR SAMPLE DATE SHOWN

WELL	YR	MO	DY	ST	DEPTH (FT)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)
----	--	--	--	--	-----	-----	---	-----	-----
WA55	84	6	18		6443.9				
		7	30		6440.3				
		9	14		6440.1				
		10	22		6440.9				
WA56	84	6	18		6442.7				
		7	30		6439.1				
		9	14		6439.0				
		10	22		6437.6				

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSIBLE

WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-4A01

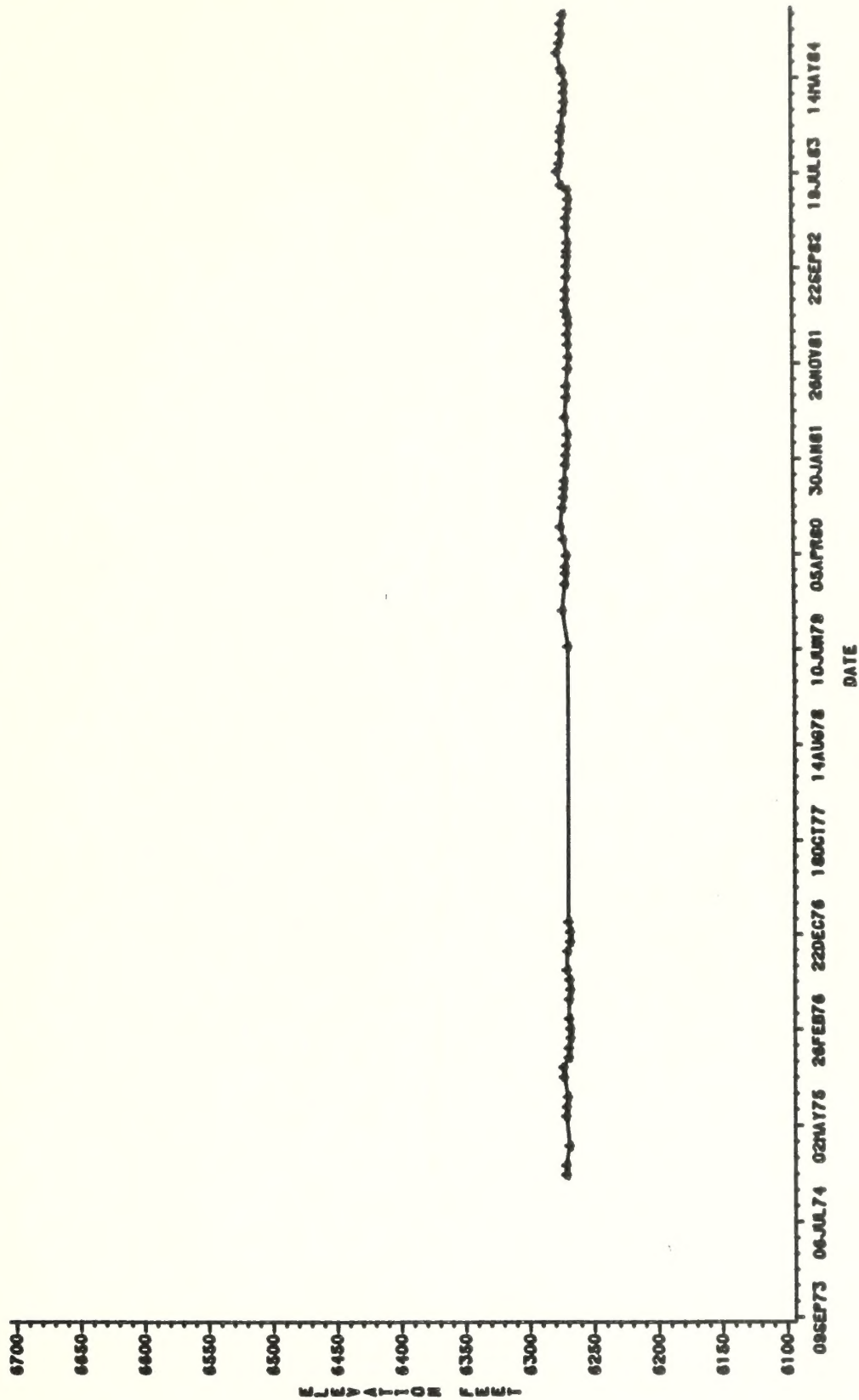


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WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-MA02

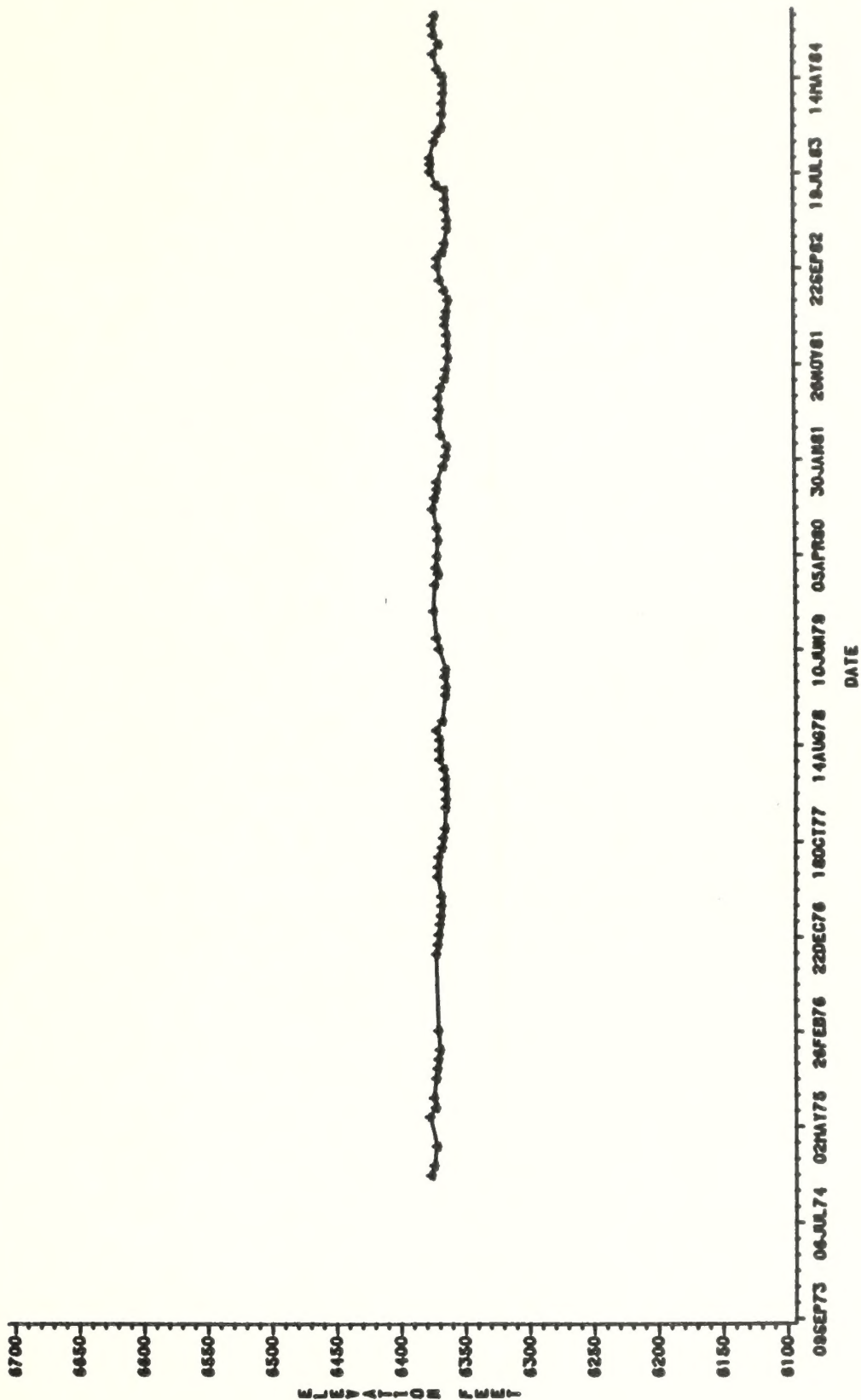


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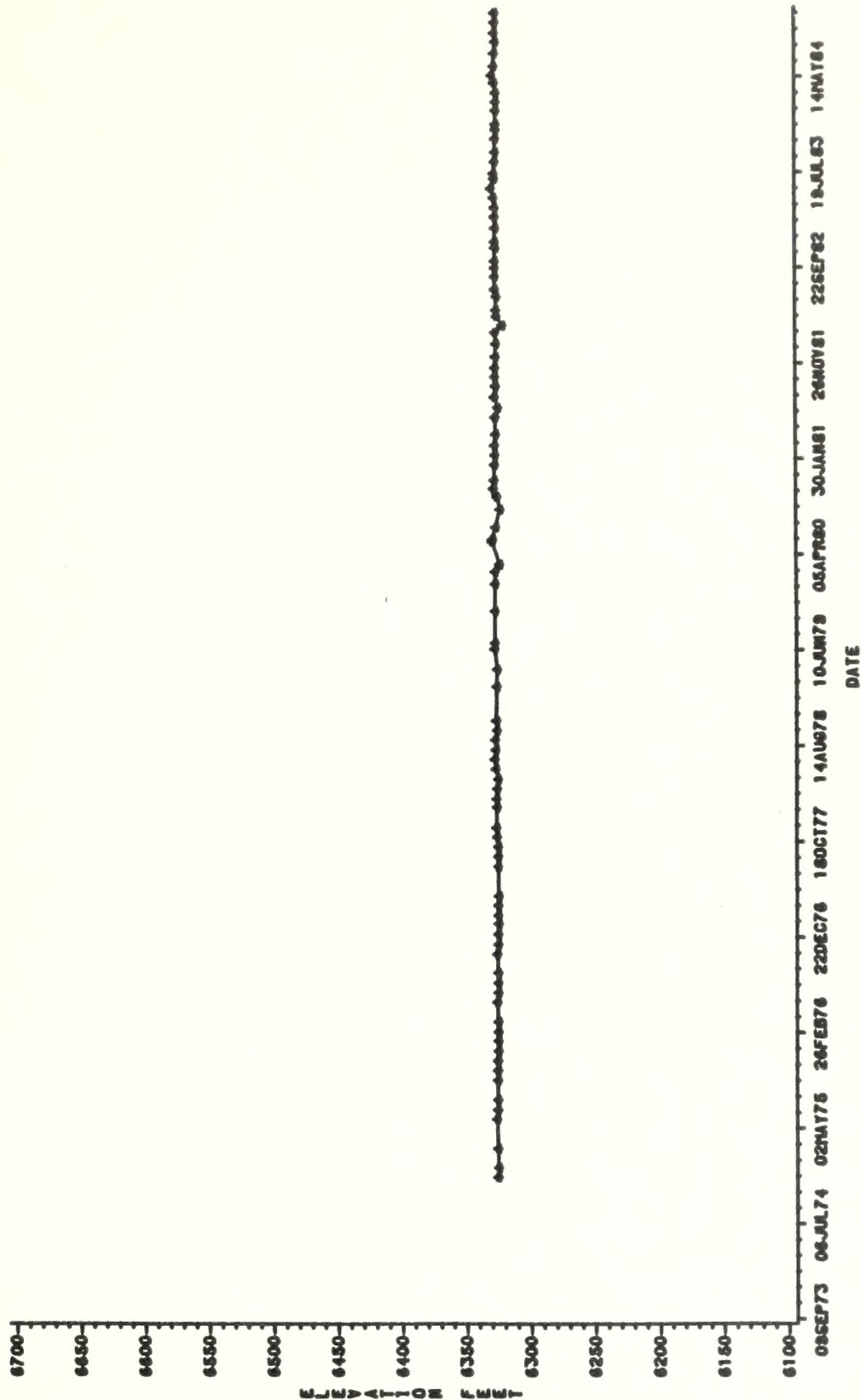


CLINICAL DATA IN PROGRESS

WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-WAG3



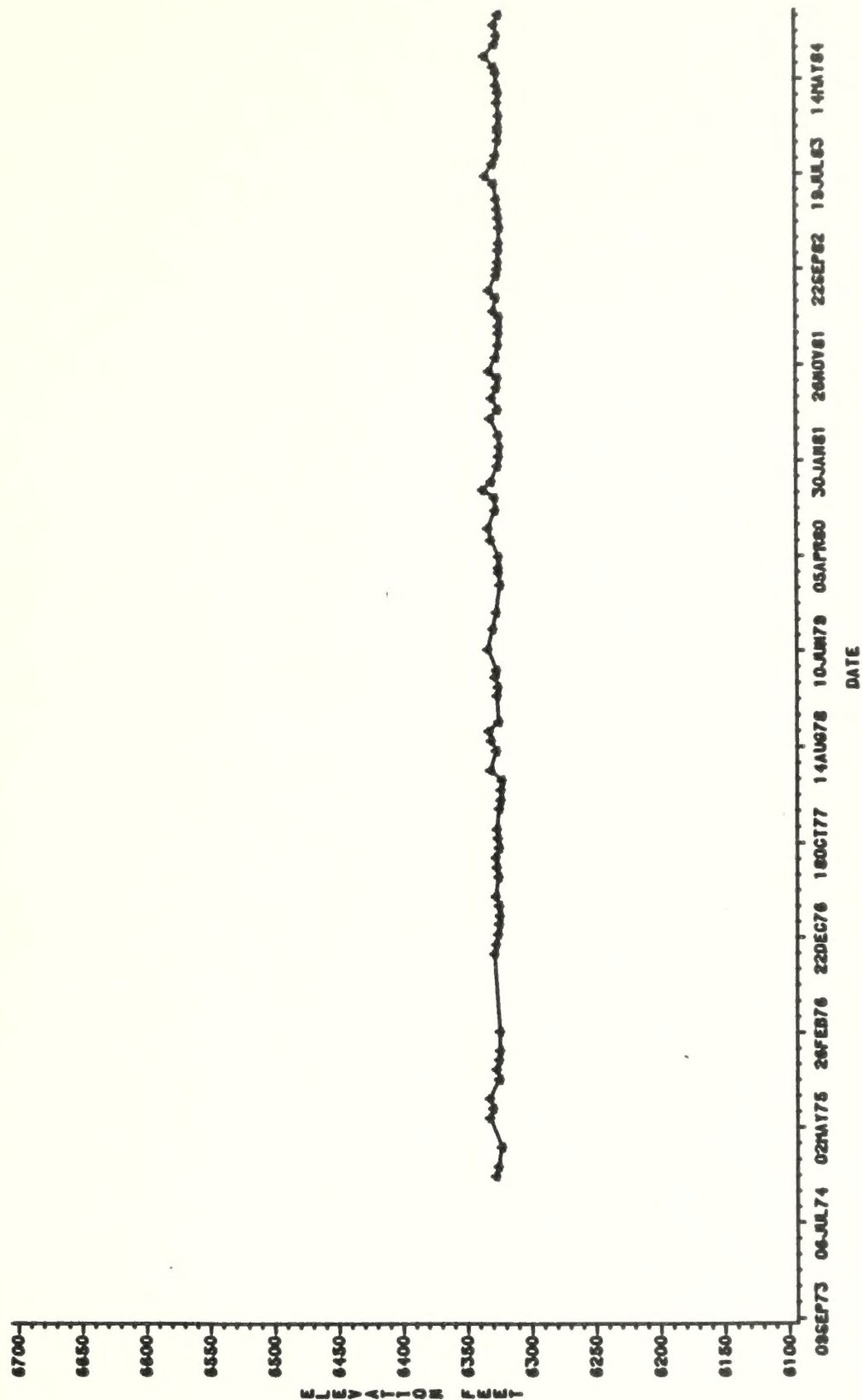
WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-MA05



STUDY OF THE EFFECT OF TEMPERATURE ON THE RATE OF REACTION



WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-1A06



1944

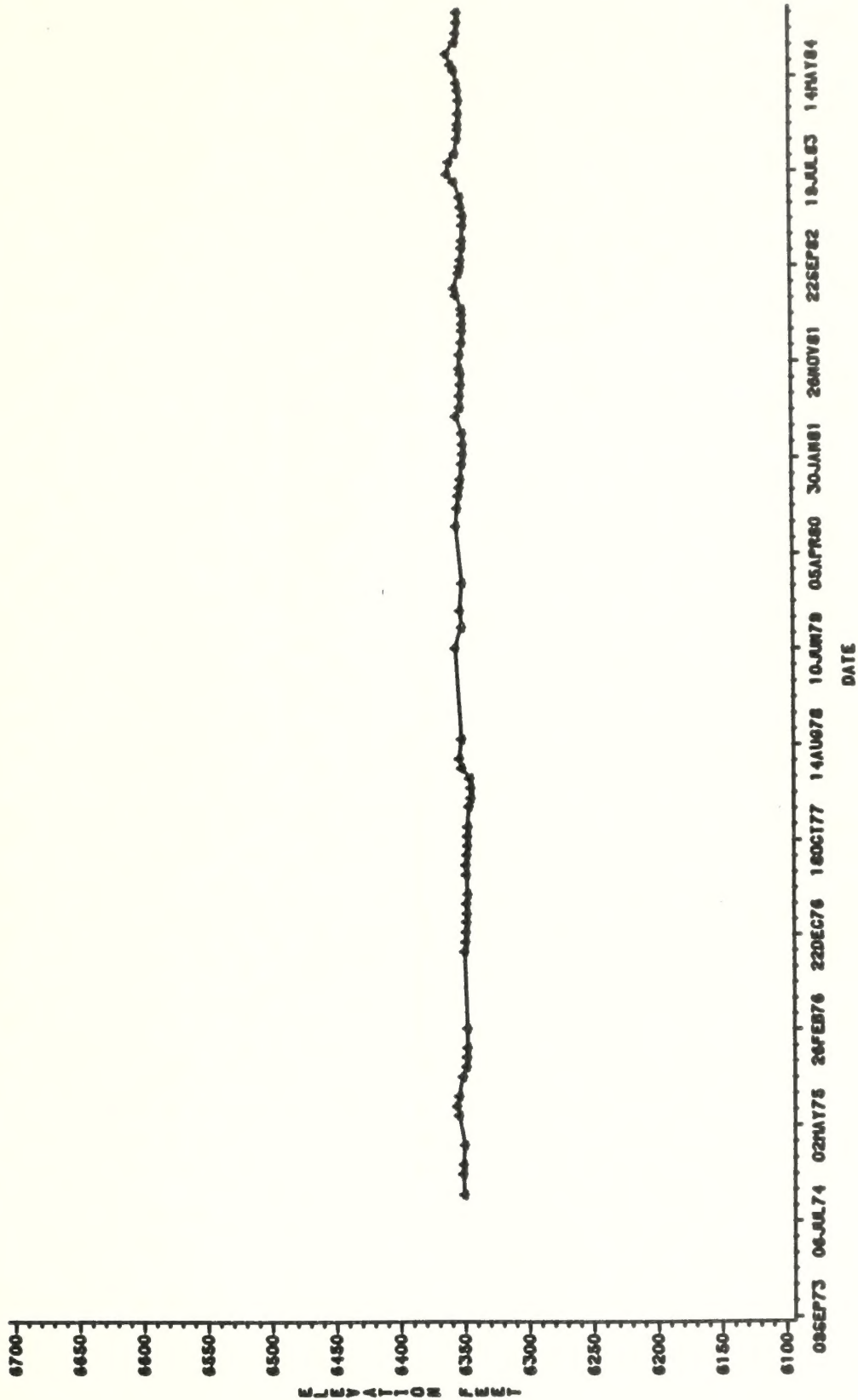
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1000 900 800 700 600 500 400 300 200 100 0

1000 900 800 700 600 500 400 300 200 100 0

1000 900 800 700 600 500 400 300 200 100 0

WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-MA07



1912

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1000

900

800

700

600

500

400

300

200

100

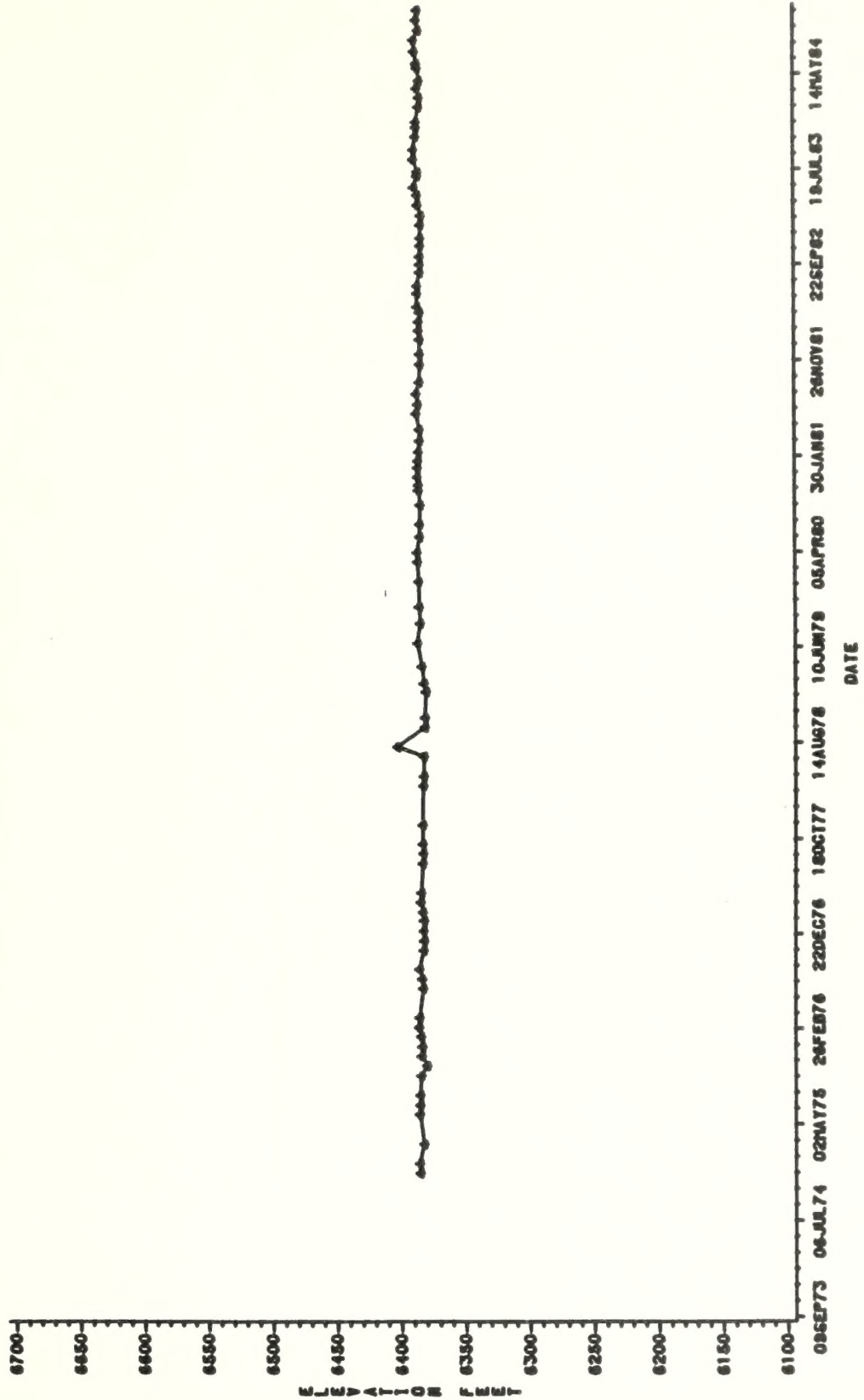
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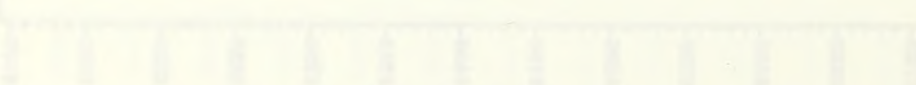
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WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-1408



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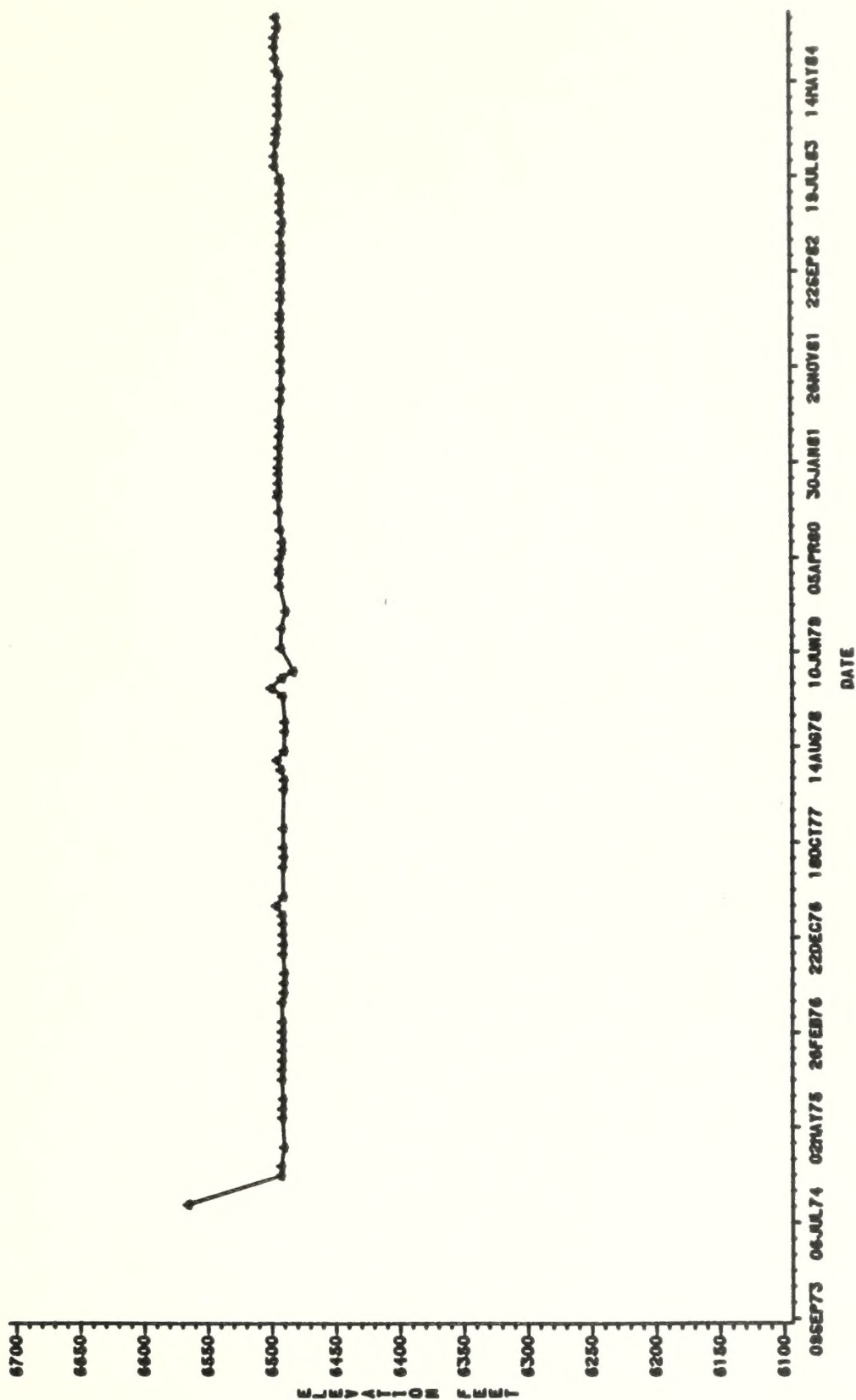
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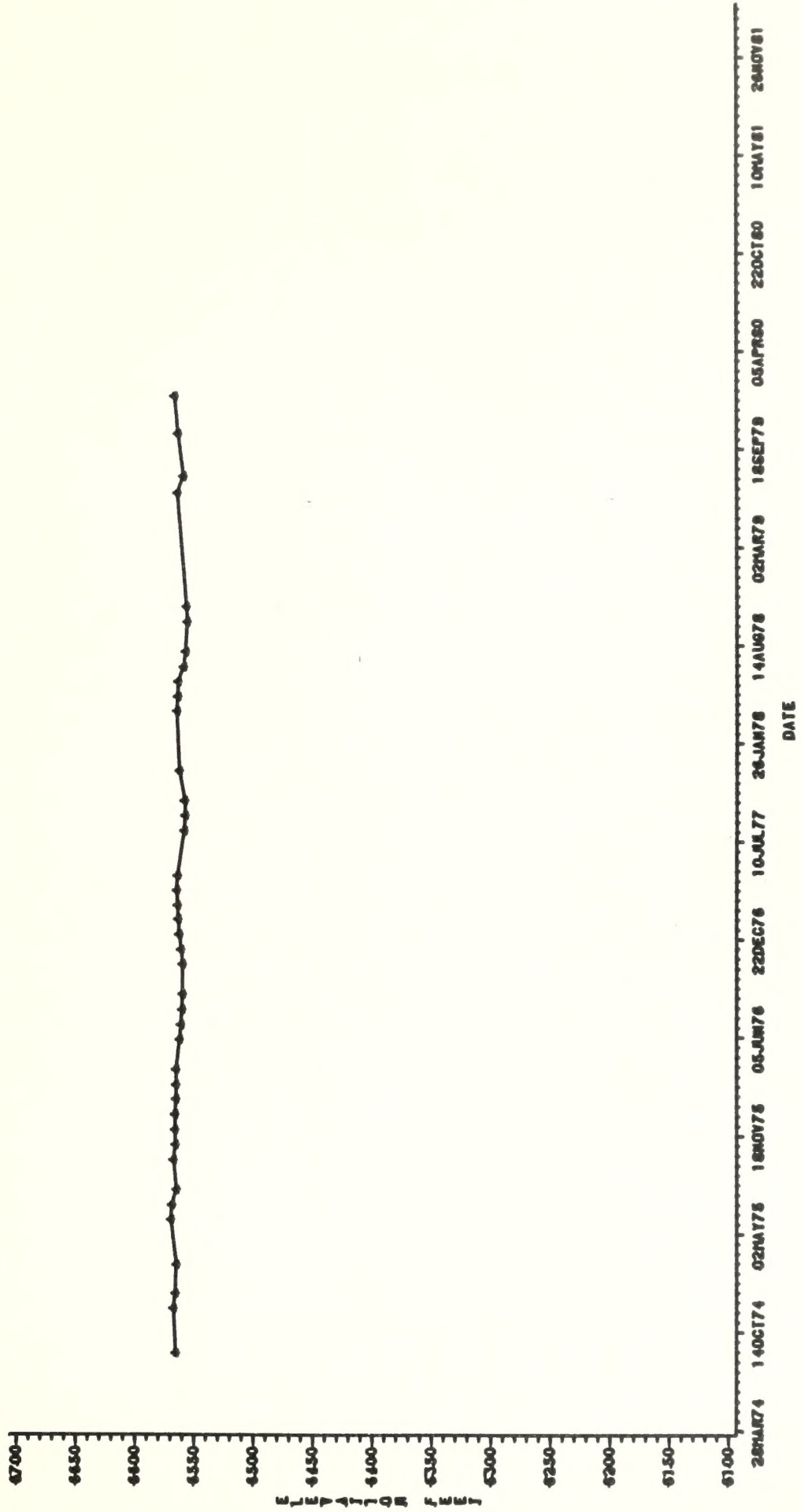
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WATER LEVEL PLOTS IN ALLUVIAL WELLS

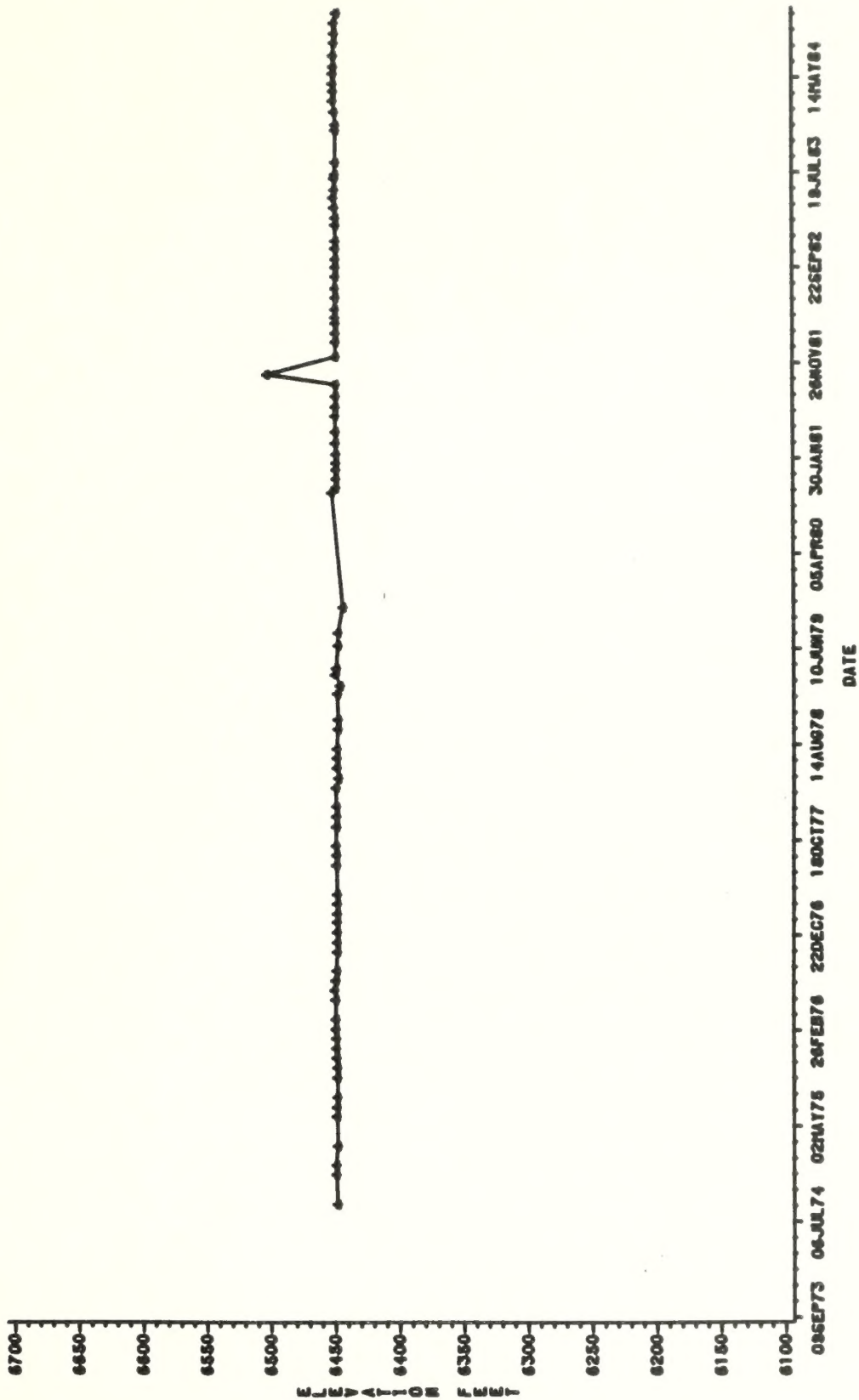
LOC-MA09



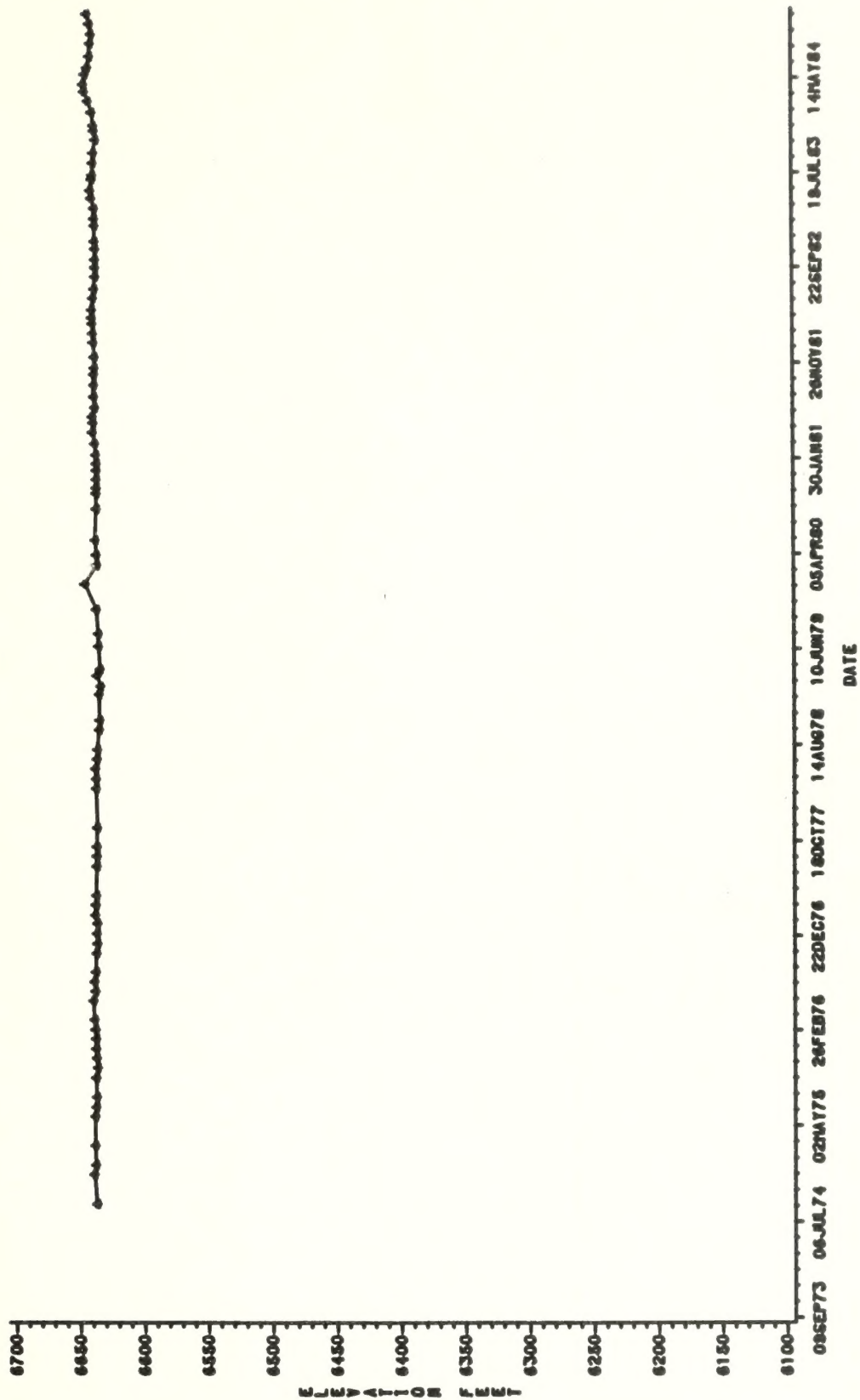
WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-MA10



WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-WA11

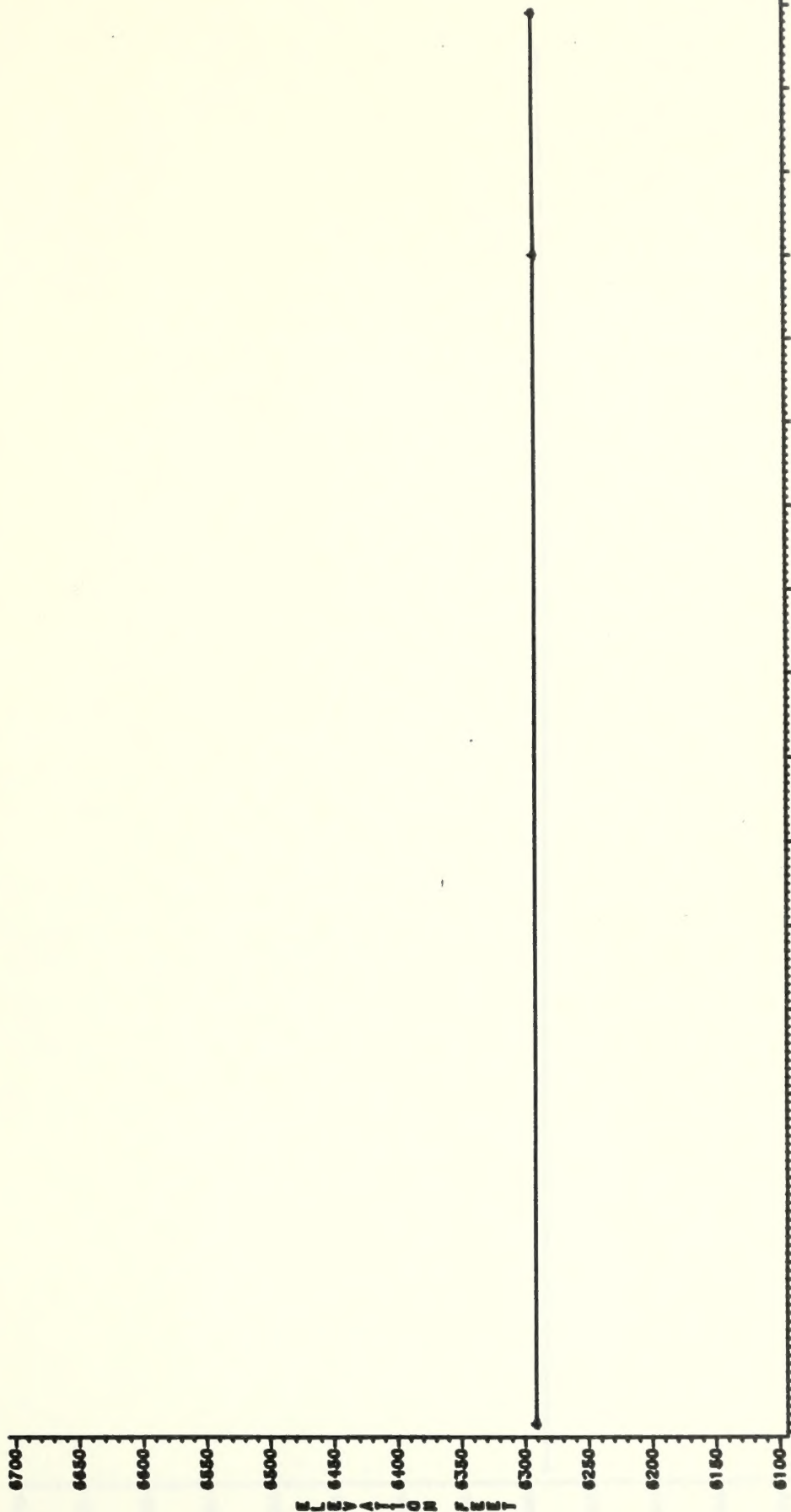


WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-1112



WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOG-WA21



19 JUL 63 08 AUG 63 28 AUG 63 17 SEP 63 07 OCT 63 27 OCT 63 16 NOV 63 06 DEC 63 26 DEC 63 15 JAN 64 04 FEB 64 24 FEB 64 15 MAR 64 04 APR 64 24 APR 64 14 MAY 64 03 JUN 64 23 JUN 64

DATE

WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOG-W22

ELEVATION
FEET

6700
6650
6600
6550
6500
6450
6400
6350
6300
6250
6200
6150
6100

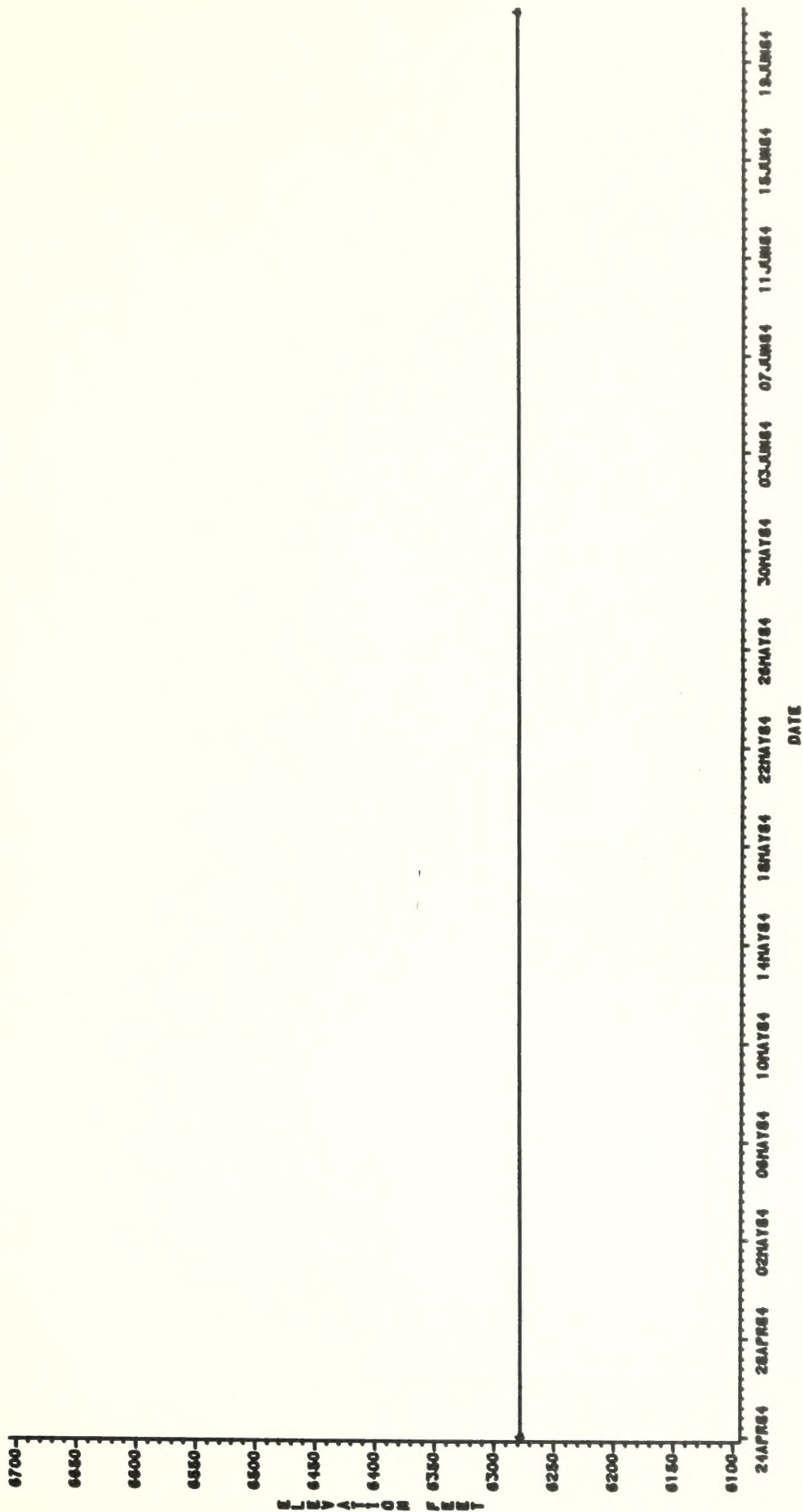


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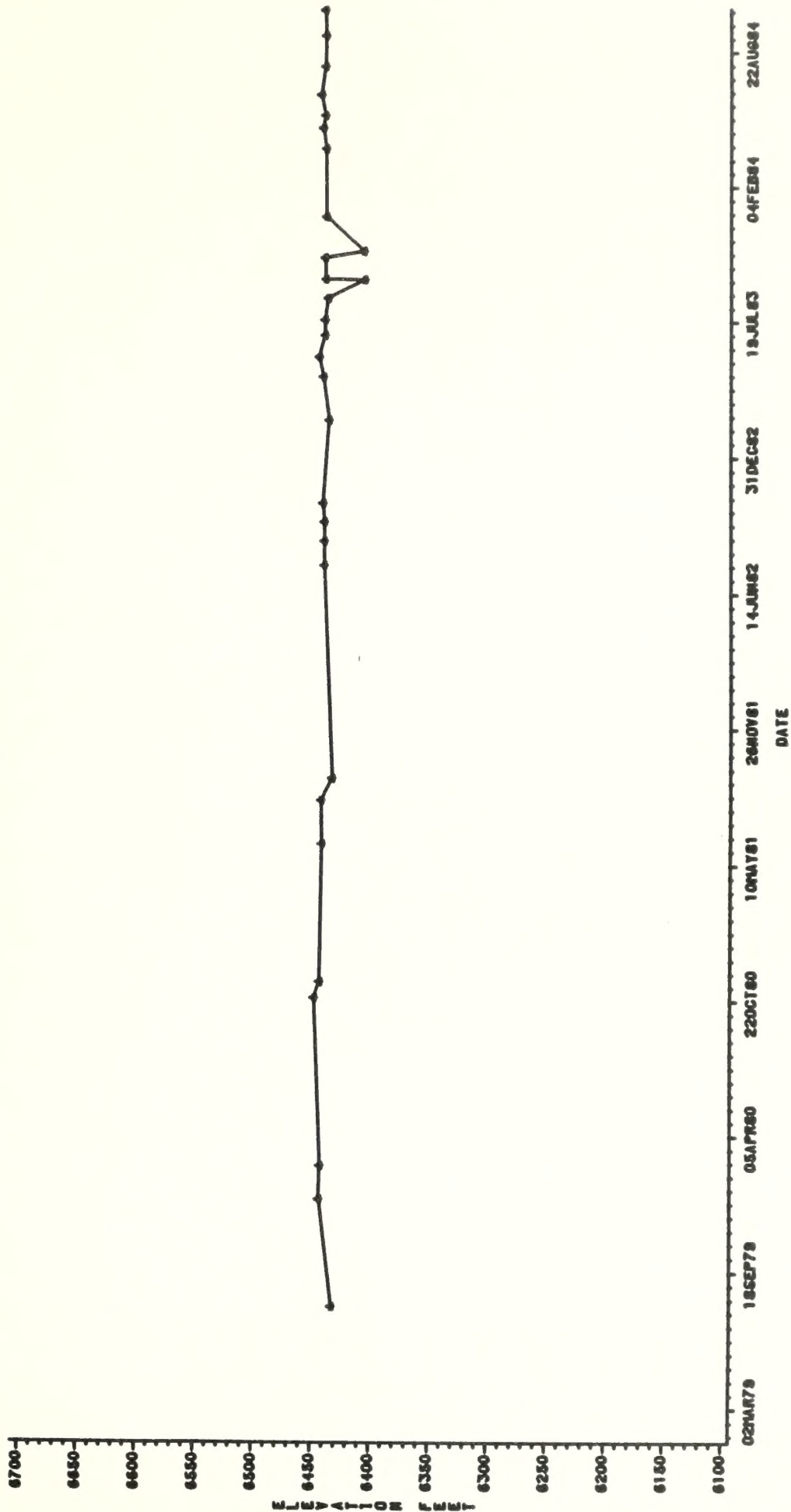
DATE

WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC-MA24



WATER LEVEL PLOTS IN ALLUVIAL WELLS LOG-WASS



WATER LEVEL PLOTS IN ALLUVIAL WELLS LOC-MA56

ELEVATION
FEET

6700
6650
6600
6550
6500
6450
6400
6350
6300
6250
6200
6150
6100



14-JUL-80 22-OCT-80 30-JAN-81 10-MAY-81 18-AUG-81 24-NOV-81 06-MAR-82 14-JUN-82 22-SEP-82 31-DEC-82 10-APR-83 19-JUL-83 27-OCT-83 04-FEB-84 14-MAY-84 22-AUG-84

DATE

10-42

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BEDROCK
WELLS

1.2.1.4 Bedrock Wells

This section contains well water elevation readings sampled below the alluvium. Data are presented in tabular format for the sample period June through November 1984 and time series plots for 1979 through November 1984. Monitoring of these wells is a requirement of the Interim Monitoring Program (IMP) and the Water Augmentation Plan (WAP), State of Colorado Court, Division 5.

The deep well monitoring network on C-b Tract is presented in 2 figures in this section, Figures 1.2.1.4-1 and 1.2.1.4-2. Well computer codes on these figures are defined as:

Upper Uinta Formation	- WB\$\$
Uinta Formation	- WC\$\$
Upper Parachute Creek 1 (UPC ₁)	- WD\$\$
Upper Parachute Creek 2 (UPC ₂)	- WE\$\$
Lower Parachute Creek 3 (LPC ₃)	- WG\$\$
Lower Parachute Creek 4 (LPC ₄)	- WH\$\$
Upper Aquifer Zone	- WX\$\$
Lower Aquifer Zone	- WY\$\$

Sampling frequencies for these wells vary by type, location (in respect to Tract) and purpose of monitoring. Table 1.2-1 in Section 1.2 references the sampling requirements for each well. This table replaced Exhibit B, which displayed monitoring requirements for the WAP during development on C-b Tract.

Tables and figures of data reported in this section are presented in the following list:

<u>Table No.</u>	<u>Title</u>	<u>Page No.</u>
Table 1.2.1.4-1	Water Levels - Upper Uinta Formation Zone	I-101
Table 1.2.1.4-2	Water Levels - Uinta Formation Zone	I-102
Table 1.2.1.4-3	Water Levels - Upper Parachute Creek 1	I-103
Table 1.2.1.4-4	Water Levels - Upper Parachute Creek 2	I-105
Table 1.2.1.4-5	Water Levels - Lower Parachute Creek	I-106
Table 1.2.1.4-6	Water Levels - Upper Aquifer Wells	I-107
Table 1.2.1.4-7	Water Levels - Upper Aquifer Wells Required by WAP	I-108
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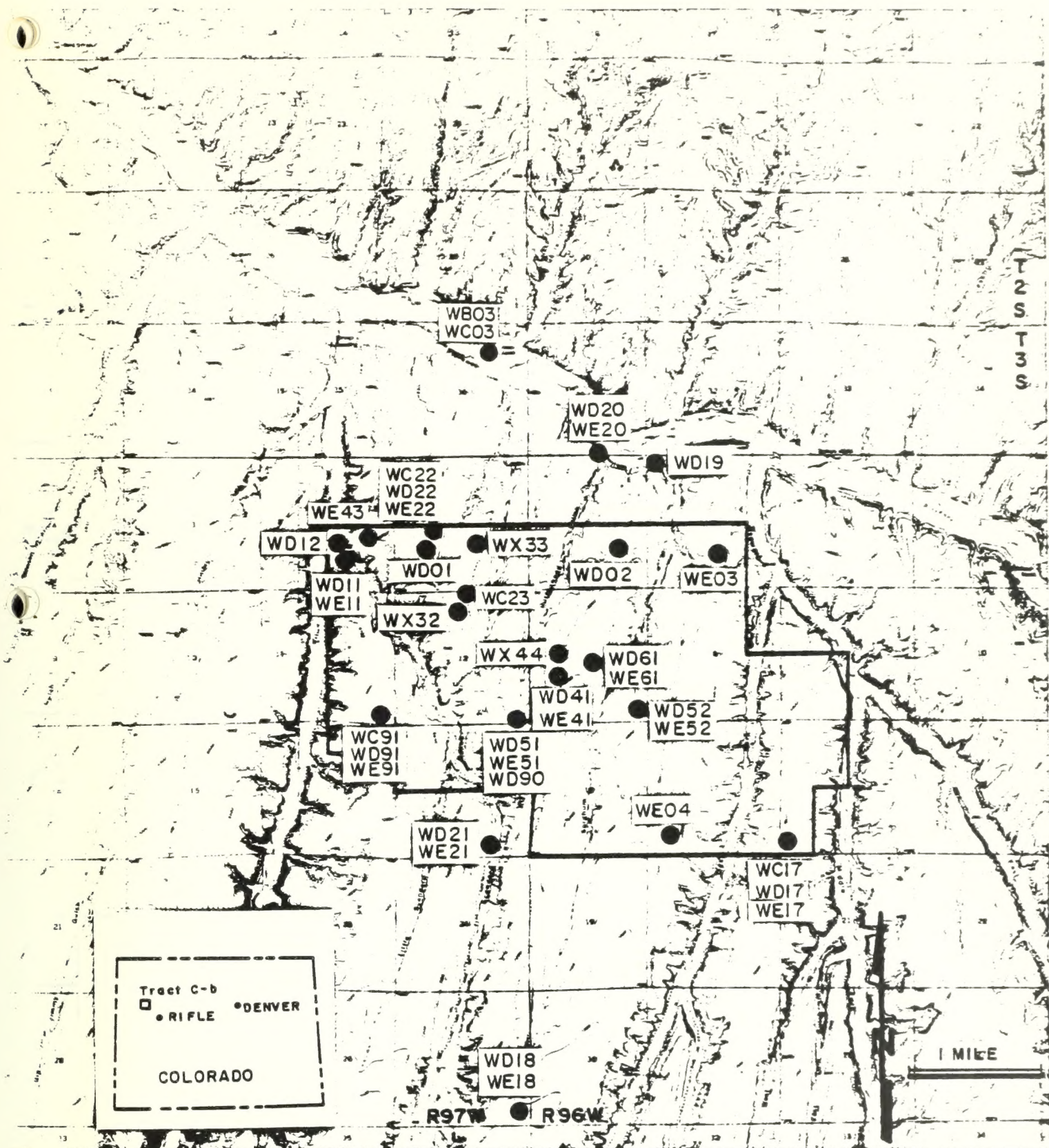


FIGURE 1.2.1.4-1 DEEP WELL MONITORING NETWORK NEAR
C-b TRACT FOR UINTA, UPC₁ AND UPC₂ ZONES

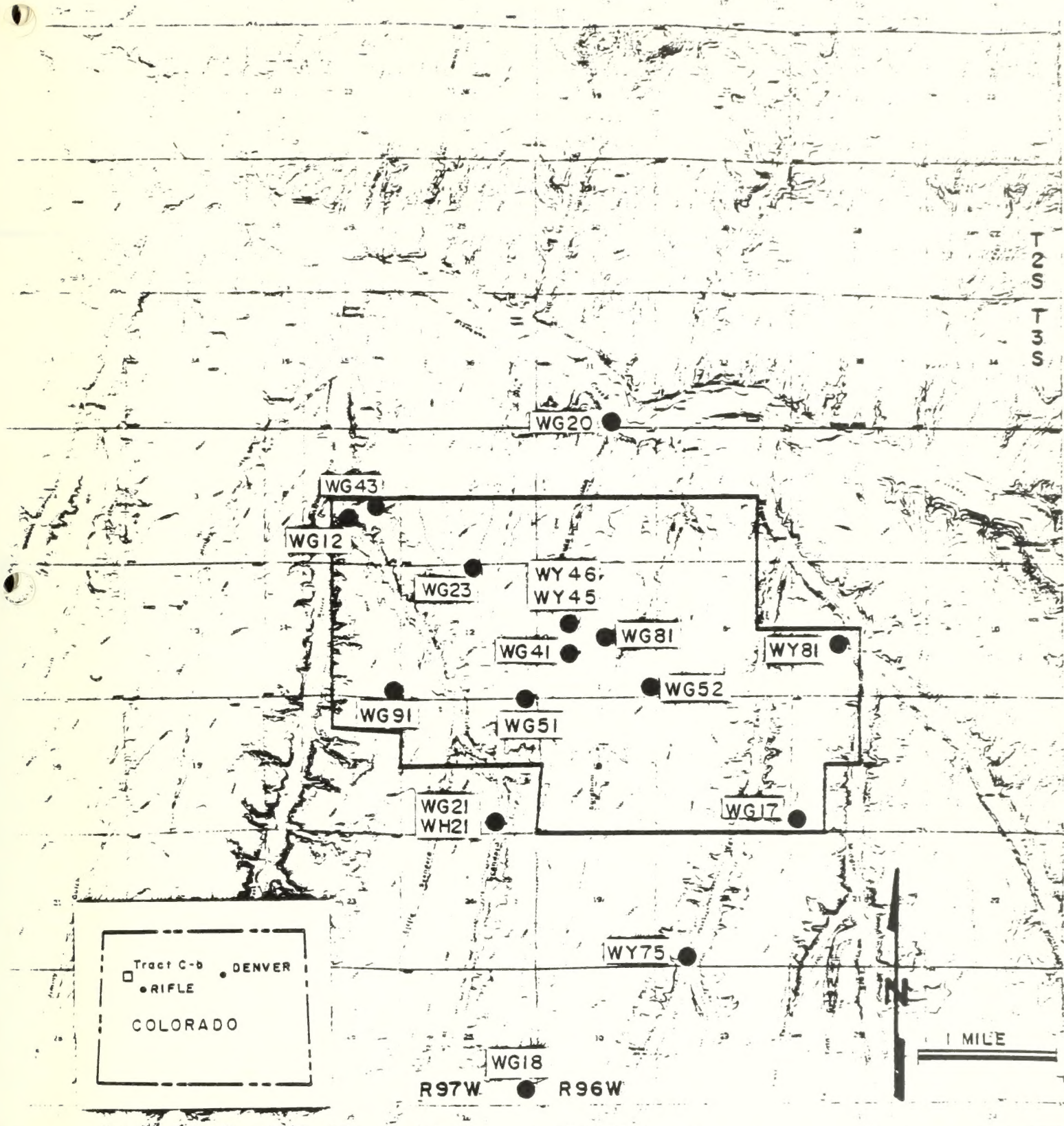


FIGURE 1.2.1.4-2 DEEP WELL MONITORING NETWORK NEAR C-b TRACT FOR LPC₃, LPC₄ ZONES

TABLE 1.2.1.4-1

CB-TRACT
WATER LEVELS
UPPER UNITA FORMATION ZONE
FOR SAMPLE DATE SHOWN

			WELL ID	
			WB03	WB21
			DEPTH	DEPTH
YR	MO	DY	(FT)	(FT)
84	6	21	6286	FLWING

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-2

CB-TRACT
WATER LEVELS
UNITAH FORMATION ZONE
FOR SAMPLE DATE SHOWN

YR	MO	DY	WELL ID				
			WC03 DEPTH (FT)	WC17 DEPTH (FT)	WC22 DEPTH (FT)	WC23 DEPTH (FT)	WC91 DEPTH (FT)
84	6	14					6520
		19				6424	
		21	6286				
		25		6657			
		28			6341	6425	
	7	31			6341	6429	
	8	29		6656			
		30				6430	
		31			6344		
	9	26			6342	6428	
	10	29			6341	6427	6523
		30		6655			
	11	30			6345	6433	

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-3

CB-TRACT
WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DY	WD02 ELEV (FT)	WD12 ELEV (FT)	WD14 ELEV (FT)	WD15 ELEV (FT)	WD17 ELEV (FT)	WD18 ELEV (FT)	WD19 ELEV (FT)
<hr/>									
84	6	11			6478	6516			
		12	6427	6357					
		18							6353
		25		6357			6643		
	7	23							6355
		26	6429		6478	6518		6915	
		30		6357					
	8	14			6478	6518			
		27	6429						
		29					6641		
		31		6357					6353
	9	25	6428		6478	6518			
		26						6915	6351
		27		6357					
	10	25	6428		6478	6518			
		29		6357					6351
		30					6641		
	11	20	6427						
		29		6357	6478	6519		6915	
		30							6350

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSABLE

TABLE 1.1.1.4-3
UPPER - WATER - CHECK 1
CO-TRACT
FROM SAMPLE DATE 1980

ST	NO	OV	WELL ELEV (FT)	WELL ELEV (FT)	WELL ELEV (FT)	WELL ELEV (FT)	WELL ELEV (FT)	WELL ELEV (FT)
1	1	11	82.5	82.5	82.5	82.5	82.5	82.5
2	2	12	82.5	82.5	82.5	82.5	82.5	82.5
3	3	13	82.5	82.5	82.5	82.5	82.5	82.5
4	4	14	82.5	82.5	82.5	82.5	82.5	82.5
5	5	15	82.5	82.5	82.5	82.5	82.5	82.5
6	6	16	82.5	82.5	82.5	82.5	82.5	82.5
7	7	17	82.5	82.5	82.5	82.5	82.5	82.5
8	8	18	82.5	82.5	82.5	82.5	82.5	82.5
9	9	19	82.5	82.5	82.5	82.5	82.5	82.5
10	10	20	82.5	82.5	82.5	82.5	82.5	82.5
11	11	21	82.5	82.5	82.5	82.5	82.5	82.5
12	12	22	82.5	82.5	82.5	82.5	82.5	82.5
13	13	23	82.5	82.5	82.5	82.5	82.5	82.5
14	14	24	82.5	82.5	82.5	82.5	82.5	82.5
15	15	25	82.5	82.5	82.5	82.5	82.5	82.5
16	16	26	82.5	82.5	82.5	82.5	82.5	82.5
17	17	27	82.5	82.5	82.5	82.5	82.5	82.5
18	18	28	82.5	82.5	82.5	82.5	82.5	82.5
19	19	29	82.5	82.5	82.5	82.5	82.5	82.5
20	20	30	82.5	82.5	82.5	82.5	82.5	82.5

WELL - 100' DEEP
WELL - 100' DEEP
WELL - 100' DEEP
WELL - 100' DEEP

TABLE 1.2.1.4-3 (cont'd)

CB-TRACT
WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DAY	WD20 ELEV (FT)	WD21 ELEV (FT)	WD22 ELEV (FT)	WD41 ELEV (FT)	WD51 ELEV (FT)	WD52 ELEV (FT)	WD57 ELEV (FT)	WD61 ELEV (FT)	WD90 ELEV (FT)	WD91 ELEV (FT)
84	6	12		6699		6508		6570		6537		
		13										
		14										
		18	6333				6599				6599	6482
		25							6638			
		28			6329						6597	
7	2		6335									
		9						6571				
		23	6335							6537		
		26										
		30		6699							6595	
		31			6330	6509	6598					
8	16											
		27							6638	6533		
		29										
		30		6699			6597				6595	
		31	6333		6333		6597					
9	17											
		25								6533		
		26	6332									
		27		6699				6573				
		29						6574				
10	25					6509	6596					
		29	6332	6700	6330					6533	6593	6482
		30										
11	29			6699				6574	6639			
		30	6332		6334					6536		

PLUGGED = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL DRY
 INACCS = WELL INACCESSABLE

CB-TRACT
WATER LEVELS
TABLE 1.2.1.4-4
UPPER PARACHUTE - CREEK 2
FOR SAMPLE DATE SHOWN

YR	MO	DY	WE03 ELEV (FT)	WE04 ELEV (FT)	WE17 ELEV (FT)	WE18 ELEV (FT)	WE20 ELEV (FT)	WE21 ELEV (FT)	WE41 ELEV (FT)	WE43 ELEV (FT)	WE51 ELEV (FT)	WE52 ELEV (FT)	WE61 ELEV (FT)	WE91 ELEV (FT)
84	6	12						6644	6461			6570	6537	
		13	6364	6658										6448
		14												
		18					6330				6510			
		25			6623									
		28								6332				
7		2					6331							
		9										6569		
		19	6364	6660										
		23					6331						6537	
		26				6915		6640						
		30									6509			
		31							6460					
8		16											6533	
		27	6365	6660	6623					6335		6554		
		29												
		30					6331	6640			6507			
		31												
9		17									6507		6533	
		25												
		26				6915								
		27	6366	6661			6332	6628						
10		25	6367	6661					6458			6573	6533	6449
		29					6332	6630				6567		
		30			6623									
11		29	6365	6660		6916		6628				6609	6536	
		30												
		30					6332			6334				

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLOWING = WELL FLOWING
 INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-5

CB-TRACT
WATER LEVELS FOR LOWER PARACHUTE CREEK
FOR SAMPLE DATE SHOWN

			WG - LPC3					WH - LPC4									
YR	MO	DAY	WG12 ELEV (FT)	WG14 ELEV (FT)	WG17 ELEV (FT)	WG18 ELEV (FT)	WG20 ELEV (FT)	WG21 ELEV (FT)	WG23 ELEV (FT)	WG40 ELEV (FT)	WG41 ELEV (FT)	WG43 ELEV (FT)	WG51 ELEV (FT)	WG52 ELEV (FT)	WG61 ELEV (FT)	WG91 ELEV (FT)	WH21 ELEV (FT)
84	6	12	6236					6644			6272			6561	6258		6644
		13														6302	
		14															
		18					6330						6345				
		19							6028								
		25	6236		6623				6028			6297					
		28					6331										
7		2												6562			
		9					6331										
		23															
		26				6841									6263		6640
		30	6254							6367							
		31		6231					6026			6280	6342				
8		16															
		27									6269	6294			6298		
		29			6623												6639
		30															
		31	6254				6331		6027				6340				
9		17															
		25											6340		6434		
		26															
		27	6254			6841			6024								6628
		29									6265	6289	6337	6560	6455	6295	6630
10		25										6288		6562			
		29	6254				6332		6023								
		30															
		31	6254														
11		29				6842			6024			6284	6336	6564	6489		6629
		30					6332										

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLOWING = WELL FLOWING
 INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-6

CB-TRACT
WATER LEVELS IN UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

		WELL ID - M.P. ELEV (FT)		
		WX32	WX38	WX44
YR	MO	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
<hr/>				
84	6		6456	6458
	7		6456	6458
	8	5925	6455	6458
	9		6455	6458
	10	5923	6456	6458
	11	5921		6458

PLUGGD = WELL PLUGGED

DRY = WELL DRY

FLWING = WELL FLOWING

INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-7

CB-TRACT
 WATER LEVELS IN UPPER AQUIFER WELLS
 REQUIRED BY WATER AUGMENTATION PLAN
 FOR SAMPLE DATE SHOWN

		WELL ID - MEASURING POINT ELEVATION (FT)						
YR	MO	WX64 DEPTH (FT)	WX65 DEPTH (FT)	WX67 DEPTH (FT)	WX69 DEPTH (FT)	WX71 DEPTH (FT)	WX72 DEPTH (FT)	WX73 DEPTH (FT)
84	7	6800	6331	6309	6901	CAPPED	6761	7652
	10	INACSS	6331	6309	6902	DRY	6761	7648

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSABLE
 NS = NOT SAMPLED
 CAPPED = WELL HEAD CAPPED

CH-TWIST
WATER LEVELS IN OPEN-ENDED WELLS
RECORDED BY WATER SUPPLY DIVISION
FOR SAMPLE DATE SHOWN

WELL NO.	WELL NAME	DEPTH (FT)	DATE	WELL NO.	WELL NAME	DEPTH (FT)	DATE
1	WELL 1	100	1952	2	WELL 2	100	1952
3	WELL 3	100	1952	4	WELL 4	100	1952
5	WELL 5	100	1952	6	WELL 6	100	1952
7	WELL 7	100	1952	8	WELL 8	100	1952
9	WELL 9	100	1952	10	WELL 10	100	1952
11	WELL 11	100	1952	12	WELL 12	100	1952
13	WELL 13	100	1952	14	WELL 14	100	1952
15	WELL 15	100	1952	16	WELL 16	100	1952
17	WELL 17	100	1952	18	WELL 18	100	1952
19	WELL 19	100	1952	20	WELL 20	100	1952
21	WELL 21	100	1952	22	WELL 22	100	1952
23	WELL 23	100	1952	24	WELL 24	100	1952
25	WELL 25	100	1952	26	WELL 26	100	1952
27	WELL 27	100	1952	28	WELL 28	100	1952
29	WELL 29	100	1952	30	WELL 30	100	1952
31	WELL 31	100	1952	32	WELL 32	100	1952
33	WELL 33	100	1952	34	WELL 34	100	1952
35	WELL 35	100	1952	36	WELL 36	100	1952
37	WELL 37	100	1952	38	WELL 38	100	1952
39	WELL 39	100	1952	40	WELL 40	100	1952
41	WELL 41	100	1952	42	WELL 42	100	1952
43	WELL 43	100	1952	44	WELL 44	100	1952
45	WELL 45	100	1952	46	WELL 46	100	1952
47	WELL 47	100	1952	48	WELL 48	100	1952
49	WELL 49	100	1952	50	WELL 50	100	1952
51	WELL 51	100	1952	52	WELL 52	100	1952
53	WELL 53	100	1952	54	WELL 54	100	1952
55	WELL 55	100	1952	56	WELL 56	100	1952
57	WELL 57	100	1952	58	WELL 58	100	1952
59	WELL 59	100	1952	60	WELL 60	100	1952
61	WELL 61	100	1952	62	WELL 62	100	1952
63	WELL 63	100	1952	64	WELL 64	100	1952
65	WELL 65	100	1952	66	WELL 66	100	1952
67	WELL 67	100	1952	68	WELL 68	100	1952
69	WELL 69	100	1952	70	WELL 70	100	1952
71	WELL 71	100	1952	72	WELL 72	100	1952
73	WELL 73	100	1952	74	WELL 74	100	1952
75	WELL 75	100	1952	76	WELL 76	100	1952
77	WELL 77	100	1952	78	WELL 78	100	1952
79	WELL 79	100	1952	80	WELL 80	100	1952
81	WELL 81	100	1952	82	WELL 82	100	1952
83	WELL 83	100	1952	84	WELL 84	100	1952
85	WELL 85	100	1952	86	WELL 86	100	1952
87	WELL 87	100	1952	88	WELL 88	100	1952
89	WELL 89	100	1952	90	WELL 90	100	1952
91	WELL 91	100	1952	92	WELL 92	100	1952
93	WELL 93	100	1952	94	WELL 94	100	1952
95	WELL 95	100	1952	96	WELL 96	100	1952
97	WELL 97	100	1952	98	WELL 98	100	1952
99	WELL 99	100	1952	100	WELL 100	100	1952

WELL NO. = WELL NUMBER
WELL NAME = WELL NAME
DEPTH (FT) = WELL DEPTH
DATE = DATE
WELL NO. = WELL NUMBER
WELL NAME = WELL NAME
DEPTH (FT) = WELL DEPTH
DATE = DATE

TABLE 1.2.1.4-8

CB-TRACT
WATER LEVELS IN LOWER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

		WELL ID-M.P. ELEV(FT)			
		WY44	WY45	WY46	WY81
YR	MO	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
<hr/>					
84	6	6270		6271	6532
	7	6269		6269	6531
	8	6267		6268	6530
	9	6265		6267	6530
	10	6264		6266	6529
	11	6262		6263	6529

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-9

CH-TRACT
WATER LEVELS IN LOWER AQUIFER WELLS
REQUIRED BY WATER AUGMENTATION PLAN
FOR SAMPLE DATE SHOWN

WELL ID - MEASURING POINT ELEVATION (FT)																	
YR	MO	WY64	WY65	WY66	WY67	WY68	WY69	WY70	WY71	WY72	WY75	WY76	WY77	WY78	WY79		
		DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	
84	7	6423	6311		6233	6486	6885	6961	6568	6776	6773	6864					
	10	6421	6312		6233	6486	6884	6962	6569	6776	6774	6864		7076	6624		
														7076	6626		

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSABLE
 NS = NOT SAMPLED

TABLE 1.2.1.4-10

CB-TRACT
 WATER LEVELS IN COMPOSITE WELLS
 REQUIRED BY WATER AUGMENTATION PLAN
 FOR SAMPLE DATE SHOWN

		WELL ID - MEASURING POINT ELEVATION (FT)					
YR	MO	WV01	WV02	WV03	WV04	WV05	WV10
		DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
		(FT)	(FT)	(FT)	(FT)	(FT)	(FT)
<hr/>							
84	6						6573
	7	6334				7362	6573
	8						6573
	9						
	10	6335				7362	
	11						

PLUGGD = WELL PLUGGED
 DRY = WELL DRY
 FLWING = WELL FLOWING
 INACCS = WELL INACCESSABLE
 NS = NOT SAMPLED
 CAPPED = WELL HEAD CAPPED

TABLE 1.1.1-10

WATER LEVELS IN COMPOSITE WELLS
 MEASURED BY WATER SUPPLY DIVISION
 FOR SAMPLE DATE 2000

WELL NO.	WELL NAME	WELL TYPE	WELL DEPTH (FT)	WELL ELEVATION (FT)	WELL STATUS
1	WELL 1	COMPOSITE	100	100	ACTIVE
2	WELL 2	COMPOSITE	100	100	ACTIVE
3	WELL 3	COMPOSITE	100	100	ACTIVE
4	WELL 4	COMPOSITE	100	100	ACTIVE
5	WELL 5	COMPOSITE	100	100	ACTIVE
6	WELL 6	COMPOSITE	100	100	ACTIVE
7	WELL 7	COMPOSITE	100	100	ACTIVE
8	WELL 8	COMPOSITE	100	100	ACTIVE
9	WELL 9	COMPOSITE	100	100	ACTIVE
10	WELL 10	COMPOSITE	100	100	ACTIVE

WELL NO. = WELL NUMBER
 WELL NAME = WELL NAME
 WELL TYPE = WELL TYPE
 WELL DEPTH (FT) = WELL DEPTH IN FEET
 WELL ELEVATION (FT) = WELL ELEVATION IN FEET
 WELL STATUS = WELL STATUS

TABLE 1.2.1.4-11

CB-TRACT
STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
84	5	1	5929.31	6457.22
		2	5929.31	6457.19
		3	5929.31	6457.14
		4	5929.31	6457.14
		5	5929.31	6457.19
		6	5929.63	6457.09
		7	5928.52	6456.90
		8	5928.44	6456.85
		9	5928.44	6456.92
		10	5928.43	6457.00
		11	5928.43	6456.93
		12	5928.43	6456.84
		13	5928.43	6456.80
		14	5928.43	6456.88
		15	5928.43	6457.01
		16	5928.43	6456.98
		17	5928.31	6456.92
		18	5929.20	6456.88
		19	5929.20	6456.88
		20	5929.18	6456.92
		21	5929.18	6457.01
		22	5929.61	6456.82
		23	5928.88	6456.78
		24	5928.79	6456.84
		25	5928.79	6456.88
		26	5928.79	6456.80
		27	5928.70	6456.76
		28	5930.54	6456.64
		29	5930.53	6456.50
		30	5930.53	6456.49
		31	5930.53	6456.55
	6	1	5930.53	6456.61
		2	5930.54	6456.64
		3	5930.54	6456.59
		4	5927.39	6456.72
		5	5928.00	6456.76
		6	5927.85	6456.77
		7	5926.39	6456.78
		8	5926.33	6456.83
		9	5926.61	6456.84
		10	5925.46	6456.76
		11	5925.46	6456.81
		12	5925.44	6456.67
		13	5925.44	6456.62
		14	5925.44	6456.59

TABLE 1.2.1.4-11 (cont'd)

CB-TRACT
STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
84	6	15	5925.44	6456.52
		16	5925.44	6456.42
		17	5925.44	6456.35
		18	5925.44	6456.28
		19	5925.44	6456.26
		20	5925.44	6456.29
		21	5925.44	6456.28
		22	5925.44	6456.25
		23	5925.44	6456.20
		24	5925.44	6456.11
		25	5925.44	6456.08
		26	5925.44	6456.07
		27	5925.44	6456.12
		28	5925.44	6456.17
		29	5928.66	6456.20
		30	5928.66	6456.28
	7	1	5928.67	6456.32
		2	5930.56	6456.35
		3	5927.48	6456.39
		4	5927.32	6456.38
		5	5927.80	6456.39
		6	5927.68	6456.37
		7	5926.48	6456.39
		8	5926.32	6456.38
		9	5926.61	6456.34
		10	5925.34	6456.38
		11	5925.88	6456.30
		12	5925.87	6456.30
		13	5925.87	6456.33
		14	5925.87	6456.32
		15	5925.87	6456.25
		16	5925.87	6456.21
		17	5925.87	6456.24
		18	5925.87	6456.29
		19	5925.87	6456.28
		20	5925.87	6456.28
		21	5925.87	6456.28
		22	5925.87	6456.25
		23	5925.87	6456.19
		24	5925.87	6456.09
		25	5925.87	6456.00
		26	5925.87	6455.99
		27	5926.46	6456.00
		28	5926.46	6456.03
		29	5926.46	6456.03

TABLE 1.2.1.4-11 (cont'd)

CB-TRACT
STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
<hr/>				
84	7	30	5926.44	6456.05
		31	5926.37	6456.10
	8	1	5926.37	6456.10
		2	5926.99	6456.06
		3	5925.31	6456.01
		4	5926.02	6456.00
		5	5926.02	6455.98
		6	5926.02	6455.96
		7	5925.81	6455.89
		8	5925.62	6455.86
		9	5927.51	6455.87
		10	5927.51	6455.84
		11	5927.51	6455.84
		12	5924.33	6455.79
		13	5924.90	6455.79
		14	5924.75	6455.73
		15	5924.70	6455.73
		16	5924.70	6455.71
		17	5924.70	6455.70
		18	5924.70	6455.70
		19	5924.70	6455.69
		20	5924.70	6455.72
		21	5924.70	6455.66
		22	5924.71	6455.59
		23	5924.70	6455.60
		24	5924.71	6455.60
		25	5924.71	6455.60
		26	5924.70	6455.53
		27	5927.51	6455.52
		28	5927.51	6455.53
		29	5927.51	6455.46
		30	5927.51	6455.47
		31	5927.51	6455.56
	9	1	5927.51	6455.59
		2	5927.51	6455.51
		3	5927.51	6455.49
		4	5927.51	6455.47
		5	5927.51	6455.48
		6	5925.06	6455.59
		7	5924.96	6455.65
		8	5924.96	6455.55
		9	5924.64	6455.60
		10	5923.33	6455.72
		11	5923.84	6455.82
		12	5923.84	6455.78

TABLE 1.2.1.4-11 (cont'd)

CB-TRACT
- STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
84	9	13	5923.84	6455.79
		14	5923.84	6455.83
		15	5923.84	6455.83
		16	5923.84	6455.68
		17	5923.84	6455.64
		18	5923.84	6455.54
		19	5923.84	6455.54
		20	5923.84	6455.79
		21	5923.84	6455.86
		22	5923.17	6455.82
		23	5923.15	6455.85
		24	5923.15	6455.80
		25	5923.15	6455.77
		26	5923.15	6455.83
		27	5923.14	6455.81
		28	5923.14	6455.75
		29	5923.13	6455.69
		30	5923.13	6455.73
	10	1	5923.13	6455.81
		2	5923.13	6455.74
		3	5923.13	6455.77
		4	5923.13	6455.93
		5	5923.13	6455.95
		6	5923.13	6455.89
		7	5923.13	6455.86
		8	5923.13	6455.87
		9	5923.13	6455.91
		10	5923.13	6455.87
		11	5923.13	6455.88
		12	5923.13	6455.87
		13	5922.81	6455.86
		14	5922.66	6456.00
		15	5921.96	6456.16
		16	5921.96	6456.22
		17	5921.95	6456.32
		18	5921.95	6456.29
		19	5921.95	6456.36
		20	5921.95	6456.49
		21	5921.95	6456.46
		22	5921.95	6456.42
		23	5921.95	6456.38
		24	5921.95	6456.27
		25	5922.94	6456.20
		26	5922.92	6456.19
		27	5922.92	6456.21

TABLE 1.2.1.4-11 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 UPPER AQUIFER WELLS
 FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
<hr/>				
84	10	28	5922.92	6456.19
		29	5922.92	6456.17
		30	5922.91	6456.17
		31	5922.91	6456.26
	11	1	5922.91	6456.14
		2	5922.91	6456.15
		3	5922.91	6456.13
		4	5922.91	6455.99
		5	5922.91	6455.96
		6	5922.91	6456.00
		7	5922.91	6456.08
		8	5922.91	6456.10
		9	5922.91	6455.97
		10	5922.91	6455.99
		11	5922.91	6456.02
		12	5923.71	6456.01
		13	5923.71	6456.02
		14	5923.71	6455.94
		15	5923.71	6455.89
		16	5923.71	6455.92
		17	5922.31	6456.04
		18	5922.61	6456.03
		19	5922.61	6455.92
		20	5924.57	6455.91
		21	5924.57	6455.93
		22	5924.57	6455.95
		23	5924.57	6455.98
		24	5924.57	6456.16
		25	5921.34	6456.32
		26	5921.97	6456.07
		27	5921.95	6456.06
		28	5921.95	6456.12
		29	5921.95	6456.16
		30	5921.95	6456.15

TABLE 1.2.1.4-12

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 LOWER AQUIFER WELLS
 FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL
			WY44
YR	MO	DY	DEPTH (FT)
<hr/>			
84	5	1	6274.47
		2	6274.41
		3	6274.34
		4	6274.29
		5	6274.22
		6	6273.93
		7	6273.79
		8	6273.78
		9	6273.81
		10	6273.71
		11	6273.58
		12	6273.46
		13	6273.42
		14	6273.39
		15	6273.41
		16	6273.26
		17	6273.18
		18	6273.09
		19	6273.04
		20	6273.07
		21	6272.96
		22	6272.79
		23	6272.78
		24	6272.77
		25	6272.80
		26	6272.73
		27	6272.68
		28	6272.53
		29	6272.37
		30	6272.33
		31	6272.33
	6	1	6272.33
		2	6272.30
		3	6272.21
		4	6272.28
		5	6272.26
		6	6272.17
		7	6272.17
		8	6272.07
		9	6271.97
		10	6271.88
		11	6271.84
		12	6270.90
		13	6270.80
		14	6270.70

TABLE 1.2.1.4-12 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 LOWER AQUIFER WELLS
 FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL
			WY44
YR	MO	DY	DEPTH (FT)
<hr/>			
84	6	15	6270.61
		16	6270.53
		17	6270.49
		18	6270.43
		19	6270.37
		20	6270.33
		21	6270.28
		22	6270.22
		23	6270.13
		24	6270.00
		25	6269.91
		26	6269.84
		27	6269.80
		28	6269.73
		29	6269.64
		30	6269.61
	7	1	6269.55
		2	6269.49
		3	6269.44
		4	6269.37
		5	6269.29
		6	6269.24
		7	6269.18
		8	6269.09
		9	6269.00
		10	6268.94
		11	6268.83
		12	6268.74
		13	6268.72
		14	6268.66
		15	6268.54
		16	6268.46
		17	6268.48
		18	6268.44
		19	6268.37
		20	6268.85
		21	6268.86
		22	6268.87
		23	6268.81
		24	6268.90
		25	6269.46
		26	6269.40
		27	6269.15
		28	6268.97
		29	6268.85

TABLE 1.2.1.4-12 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 LOWER AQUIFER WELLS
 FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL
			WY44
YR	MO	DY	DEPTH (FT)
<hr/>			
84	7	30	6268.80
		31	6268.78
	8	1	6268.73
		2	6268.67
		3	6268.58
		4	6268.52
		5	6268.45
		6	6268.40
		7	6268.28
		8	6268.22
		9	6268.17
		10	6268.09
		11	6268.02
		12	6267.93
		13	6267.89
		14	6267.85
		15	6267.78
		16	6267.73
		17	6267.68
		18	6267.62
		19	6267.55
		20	6267.51
		21	6267.38
		22	6267.28
		23	6267.22
		24	6267.19
		25	6267.15
		26	6267.05
		27	6267.01
		28	6266.99
		29	6266.90
		30	6266.86
		31	6266.91
	9	1	6266.86
		2	6266.77
		3	6266.72
		4	6266.70
		5	6266.70
		6	6266.78
		7	6266.76
		8	6266.65
		9	6266.65
		10	6266.68
		11	6266.66
		12	6266.26

TABLE 1.2.1.4-15 (cont'd)

STATION RECORD WATER LEVEL
LOWER QUARTER WELLS
FOR SAMPLE DATE SHOWN

WELL TO - FT FROM GROUND LEVEL

DEPTH (FT)	WB	WD	WT
86.8-89	8	7	86
87.8-89	8		
88.8-89	8		
89.8-89	8		
90.8-89	8		
91.8-89	8		
92.8-89	8		
93.8-89	8		
94.8-89	8		
95.8-89	8		
96.8-89	8		
97.8-89	8		
98.8-89	8		
99.8-89	8		
100.8-89	8		
101.8-89	8		
102.8-89	8		
103.8-89	8		
104.8-89	8		
105.8-89	8		
106.8-89	8		
107.8-89	8		
108.8-89	8		
109.8-89	8		
110.8-89	8		
111.8-89	8		
112.8-89	8		
113.8-89	8		
114.8-89	8		
115.8-89	8		
116.8-89	8		
117.8-89	8		
118.8-89	8		
119.8-89	8		
120.8-89	8		
121.8-89	8		
122.8-89	8		
123.8-89	8		
124.8-89	8		
125.8-89	8		
126.8-89	8		
127.8-89	8		
128.8-89	8		
129.8-89	8		
130.8-89	8		
131.8-89	8		
132.8-89	8		
133.8-89	8		
134.8-89	8		
135.8-89	8		
136.8-89	8		
137.8-89	8		
138.8-89	8		
139.8-89	8		
140.8-89	8		
141.8-89	8		
142.8-89	8		
143.8-89	8		
144.8-89	8		
145.8-89	8		
146.8-89	8		
147.8-89	8		
148.8-89	8		
149.8-89	8		
150.8-89	8		
151.8-89	8		
152.8-89	8		
153.8-89	8		
154.8-89	8		
155.8-89	8		
156.8-89	8		
157.8-89	8		
158.8-89	8		
159.8-89	8		
160.8-89	8		
161.8-89	8		
162.8-89	8		
163.8-89	8		
164.8-89	8		
165.8-89	8		
166.8-89	8		
167.8-89	8		
168.8-89	8		
169.8-89	8		
170.8-89	8		
171.8-89	8		
172.8-89	8		
173.8-89	8		
174.8-89	8		
175.8-89	8		
176.8-89	8		
177.8-89	8		
178.8-89	8		
179.8-89	8		
180.8-89	8		
181.8-89	8		
182.8-89	8		
183.8-89	8		
184.8-89	8		
185.8-89	8		
186.8-89	8		
187.8-89	8		
188.8-89	8		
189.8-89	8		
190.8-89	8		
191.8-89	8		
192.8-89	8		
193.8-89	8		
194.8-89	8		
195.8-89	8		
196.8-89	8		
197.8-89	8		
198.8-89	8		
199.8-89	8		
200.8-89	8		

TABLE 1.2.1.4-12 (cont'd)

CR-TRACT
 STEVENS RECORDER WATER LEVELS
 LOWER AQUIFER WELLS
 FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL
			WY44
YR	MO	DY	DEPTH (FT)
<hr/>			
84	9	13	6266.10
		14	6266.06
		15	6266.03
		16	6265.96
		17	6265.88
		18	6265.79
		19	6265.76
		20	6265.82
		21	6265.90
		22	6265.80
		23	6265.76
		24	6265.58
		25	6265.50
		26	6265.54
		27	6265.52
		28	6265.44
		29	6265.41
		30	6265.34
	10	1	6265.34
		2	6265.35
		3	6265.22
		4	6265.19
		5	6265.24
		6	6265.11
		7	6264.94
		8	6264.84
		9	6264.85
		10	6264.87
		11	6264.84
		12	6264.83
		13	6264.72
		14	6264.71
		15	6264.72
		16	6264.80
		17	6264.68
		18	6264.71
		19	6264.52
		20	6264.52
		21	6264.47
		22	6264.34
		23	6264.25
		24	6264.21
		25	6264.21
		26	6264.15
		27	6264.14

TABLE 1.2.1.4-12 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 LOWER AQUIFER WELLS
 FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL
			WY44
YR	MO	DAY	DEPTH (FT)
<hr/>			
84	10	28	6264.13
		29	6264.06
		30	6263.94
		31	6263.91
	11	1	6263.85
		2	6263.68
		3	6263.68
		4	6263.66
		5	6263.51
		6	6263.44
		7	6263.49
		8	6263.47
		9	6263.45
		10	6263.19
		11	6263.17
		12	6263.12
		13	6263.08
		14	6263.04
		15	6262.93
		16	6262.85
		17	6262.86
		18	6262.86
		19	6262.80
		20	6262.65
		21	6262.56
		22	6262.54
		23	6262.46
		24	6262.46
		25	6262.53
		26	6262.60
		27	6262.39
		28	6262.28
		29	6262.26
		30	6262.20

TABLE 1.2.1.4-13

- CB-TRACT
 STEVENS RECORDER WATER LEVELS
 UPPER PARACHUTE - CREEK 1
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WD12	WD90
			DEPTH (FT)	DEPTH (FT)
84	5	1	6355.53	6599.52
		2	6355.60	6599.52
		3	6355.55	6599.52
		4	6355.61	6599.51
		5	6355.66	6599.51
		6	6355.55	6599.51
		7	6355.36	6599.51
		8	6355.37	6599.51
		9	6355.50	6599.51
		10	6355.64	6599.50
		11	6355.57	6599.51
		12	6355.49	6599.51
		13	6355.45	6599.51
		14	6355.53	6599.51
		15	6355.64	6599.51
		16	6355.63	6599.51
		17	6355.61	6599.51
		18	6355.60	6599.51
		19	6355.64	6599.51
		20	6355.73	6599.51
		21	6355.94	6599.50
		22	6355.90	6599.50
		23	6355.76	6599.51
		24	6355.75	6599.51
		25	6355.97	6599.51
		26	6355.96	6599.51
		27	6355.96	6599.51
		28	6355.89	6599.51
		29	6355.81	6599.50
		30	6355.92	6599.48
	31	6356.05	6599.48	
6	1	6356.17	6599.48	
	2	6356.27	6599.51	
	3	6356.31	6599.50	
	4	6356.49	6599.50	
	5	6356.58	6599.51	
	6	6356.68	6599.51	
	7	6356.69	6599.50	
	8	6356.78	6599.50	
	9	6356.80	6599.50	
	10	6356.81	6599.50	
	11	6356.89	6599.50	
	12	6356.93	6599.50	
	13	6356.95	6599.50	
	14	6356.99	6599.49	

TABLE 1.2.1.4-13 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 UPPER PARACHUTE - CREEK 1
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WD12	WD90	
			DEPTH (FT)	DEPTH (FT)	
84	6	15	6357.01		
		16	6357.06		
		17	6357.12		
		18	6357.18		
		19	6357.24		
		20	6357.32		
		21	6357.39		
		22	6357.44		
		23	6357.50		
		24	6357.50		
		25	6357.50		
		26	6356.54		
		27	6356.67		
		28	6356.74	6597.00	
		29	6356.84	6597.06	
		30	6356.80	6597.06	
		7	1	6356.83	6597.02
			2	6356.91	6597.02
			3	6357.03	6596.97
			4	6357.07	6596.94
			5	6357.10	6596.94
			6	6357.16	6596.92
			7	6357.25	6596.86
			8	6357.31	6596.86
			9	6357.33	6596.77
			10	6357.39	6596.75
			11	6357.36	6596.77
			12	6357.39	6596.79
			13	6357.46	6596.71
			14	6357.50	6596.50
15	6357.48		6596.53		
16	6357.49		6596.53		
17	6357.54		6596.50		
18	6357.62		6596.50		
19	6357.65		6596.52		
20	6357.66		6596.34		
21	6357.67		6596.23		
22	6357.71		6596.21		
23	6357.67		6596.20		
24	6357.61		6596.20		
25	6357.60		6596.17		
26	6357.62		6596.17		
27	6357.64		6596.15		
28	6357.64		6596.13		
29	6357.66		6596.13		

TABLE 1.2.1.4-13 (cont'd)

CB-TRACT
STEVENS RECORDER WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DY	WD12	WD90
			DEPTH (FT)	DEPTH (FT)
84	7	30	6357.67	6596.18
		31	6357.74	6595.98
	8	1	6357.74	6596.04
		2	6357.77	6596.04
		3	6357.77	6596.03
		4	6357.73	6596.03
		5	6357.75	6596.04
		6	6357.73	6596.04
		7	6357.74	6596.04
		8	6357.69	6596.03
		9	6357.68	6596.03
		10	6357.70	6596.03
		11	6357.70	6596.03
		12	6357.72	6596.03
		13	6357.69	6596.04
		14	6357.70	6596.03
		15	6357.74	6596.03
		16	6357.71	6595.68
		17	6357.71	6595.50
		18	6357.73	6595.48
		19	6357.73	6595.48
		20	6357.76	6595.50
		21	6357.71	6595.71
		22	6357.64	6595.71
		23	6357.65	6595.71
		24	6357.65	6595.71
		25	6357.60	6595.71
		26	6357.61	6595.71
		27	6357.63	6595.71
		28	6357.63	6595.71
		29	6357.60	6595.71
		30	6357.60	6595.71
		31	6357.70	6595.19
	9	1	6357.73	6595.22
		2	6357.62	6595.33
		3	6357.57	6595.06
		4	6357.57	6595.01
		5	6357.57	6594.89
		6	6357.67	6594.88
		7	6357.69	6594.98
		8	6357.59	6595.24
		9	6357.63	6595.24
		10	6357.68	6595.23
		11	6357.69	6595.23
		12	6357.61	6595.24

TABLE 1.2.1.4-13 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 UPPER PARACHUTE - CREEK 1
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WD12 DEPTH (FT)	WD90 DEPTH (FT)
84	9	13	6357.57	6595.23
		14	6357.56	6595.23
		15	6357.59	6595.23
		16	6357.58	6595.23
		17	6357.55	6595.23
		18	6357.51	6594.27
		19	6357.54	6594.27
		20	6357.65	6594.28
		21	6357.82	6594.28
		22	6357.76	6594.28
		23	6357.76	6594.21
		24	6357.76	6594.08
		25	6357.76	6594.09
		26	6357.62	6594.08
		27	6357.67	6593.99
		28	6357.68	6593.98
		29	6357.64	6594.02
		30	6357.63	6594.08
	10	1	6357.69	6594.04
		2	6357.78	6594.04
		3	6357.74	6594.00
		4	6357.77	6593.72
		5	6357.89	6593.58
		6	6357.84	6593.59
		7	6357.75	6593.65
		8	6357.69	6593.82
		9	6357.75	6593.82
		10	6357.86	6593.79
		11	6357.87	6593.65
		12	6357.88	6593.72
		13	6357.86	6593.89
		14	6357.92	6593.77
		15	6357.95	6593.78
		16	6358.01	6593.61
		17	6358.04	6593.64
		18	6357.91	6593.64
		19	6357.81	6593.49
		20	6357.81	6593.31
		21	6357.82	6593.27
		22	6357.83	6593.32
		23	6357.93	6593.28
		24	6357.92	6593.31
		25	6357.91	6593.37
		26	6357.88	6593.31
		27	6357.88	6593.18

STATION RECORDS WATER LEVELS
UPPER FLOODWAY - CHALK 1
FOR SAMPLE DATE SHOWN

DATE	TIME	WATER LEVEL (FT)	WATER LEVEL (FT)
05-08-53	08:00	45.27	45.27
05-08-53	08:15	45.27	45.27
05-08-53	08:30	45.27	45.27
05-08-53	08:45	45.27	45.27
05-08-53	09:00	45.27	45.27
05-08-53	09:15	45.27	45.27
05-08-53	09:30	45.27	45.27
05-08-53	09:45	45.27	45.27
05-08-53	10:00	45.27	45.27
05-08-53	10:15	45.27	45.27
05-08-53	10:30	45.27	45.27
05-08-53	10:45	45.27	45.27
05-08-53	11:00	45.27	45.27
05-08-53	11:15	45.27	45.27
05-08-53	11:30	45.27	45.27
05-08-53	11:45	45.27	45.27
05-08-53	12:00	45.27	45.27
05-08-53	12:15	45.27	45.27
05-08-53	12:30	45.27	45.27
05-08-53	12:45	45.27	45.27
05-08-53	13:00	45.27	45.27
05-08-53	13:15	45.27	45.27
05-08-53	13:30	45.27	45.27
05-08-53	13:45	45.27	45.27
05-08-53	14:00	45.27	45.27
05-08-53	14:15	45.27	45.27
05-08-53	14:30	45.27	45.27
05-08-53	14:45	45.27	45.27
05-08-53	15:00	45.27	45.27
05-08-53	15:15	45.27	45.27
05-08-53	15:30	45.27	45.27
05-08-53	15:45	45.27	45.27
05-08-53	16:00	45.27	45.27
05-08-53	16:15	45.27	45.27
05-08-53	16:30	45.27	45.27
05-08-53	16:45	45.27	45.27
05-08-53	17:00	45.27	45.27
05-08-53	17:15	45.27	45.27
05-08-53	17:30	45.27	45.27
05-08-53	17:45	45.27	45.27
05-08-53	18:00	45.27	45.27
05-08-53	18:15	45.27	45.27
05-08-53	18:30	45.27	45.27
05-08-53	18:45	45.27	45.27
05-08-53	19:00	45.27	45.27
05-08-53	19:15	45.27	45.27
05-08-53	19:30	45.27	45.27
05-08-53	19:45	45.27	45.27
05-08-53	20:00	45.27	45.27
05-08-53	20:15	45.27	45.27
05-08-53	20:30	45.27	45.27
05-08-53	20:45	45.27	45.27
05-08-53	21:00	45.27	45.27
05-08-53	21:15	45.27	45.27
05-08-53	21:30	45.27	45.27
05-08-53	21:45	45.27	45.27
05-08-53	22:00	45.27	45.27
05-08-53	22:15	45.27	45.27
05-08-53	22:30	45.27	45.27
05-08-53	22:45	45.27	45.27
05-08-53	23:00	45.27	45.27
05-08-53	23:15	45.27	45.27
05-08-53	23:30	45.27	45.27
05-08-53	23:45	45.27	45.27
05-08-53	24:00	45.27	45.27

TABLE 1.2.1.4-13 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS
 UPPER PARACHUTE - CREEK 1
 FOR SAMPLE DATE SHOWN

YR	MO	DY	WD12 DEPTH (FT)	WD90 DEPTH (FT)
84	10	28	6357.81	6593.18
		29	6357.76	6593.03
		30	6357.79	6592.95
		31	6357.86	6593.01
11		1	6357.76	6592.97
		2	6357.76	6592.89
		3	6357.92	6592.90
		4	6357.87	6593.20
		5	6357.91	6593.20
		6	6357.72	6592.82
		7	6357.76	6592.82
		8	6357.77	6592.83
		9	6357.79	6592.83
		10	6357.81	6592.88
		11	6357.68	6592.71
		12	6357.74	6592.70
		13	6357.81	6592.81
		14	6357.69	6592.82
		15	6357.65	6592.65
		16	6357.65	6592.53
		17	6357.63	6592.56
		18	6357.64	6592.51
		19	6357.70	6592.51
		20	6357.71	6592.74
		21	6357.68	6592.97
		22	6357.62	6592.50
		23	6357.63	6592.45
		24	6357.64	6592.55
		25	6357.65	6592.56
		26	6357.69	6592.54
		27	6357.71	6592.55
		28	6357.72	6592.58
		29	6357.73	6592.59
		30	6357.74	6593.50

TABLE 1.2.1.4-14

CB-TRACT
 STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
 FOR SAMPLE DATE SHOWN

WG - LPC3

WH - LPC4

			WG12
YR	MO	DY	DEPTH
			(FT)

84	5	1	6237.55
		2	6237.55
		3	6237.53
		4	6237.52
		5	6237.50
		6	6237.32
		7	6237.17
		8	6237.13
		9	6237.12
		10	6237.11
		11	6237.11
		12	6237.05
		13	6236.98
		14	6236.97
		15	6236.97
		16	6236.94
		17	6236.93
		18	6236.88
		19	6236.85
		20	6236.84
		21	6236.84
		22	6236.80
		23	6236.77
		24	6236.72
		25	6236.71
		26	6236.70
		27	6236.67
		28	6236.60
		29	6236.47
		30	6236.45
		31	6236.45
	6	1	6236.45
		2	6236.44
		3	6236.44
		4	6236.44
		5	6236.43
		6	6236.43
		7	6236.44
		8	6236.43
		9	6236.42
		10	6236.39
		11	6236.36
		12	6236.34
		13	6236.20

TABLE 1.2.1.4-14 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
 FOR SAMPLE DATE SHOWN

WG - LPC3

WH - LPC4

YR	MO	DY	WG12	
			DEPTH (FT)	
84	6	14	6236.20	
		15	6236.15	
		16	6236.12	
		17	6236.10	
		18	6236.09	
		19	6236.05	
		20	6236.04	
		21	6236.02	
		22	6236.00	
		23	6235.94	
		24	6235.84	
		25	6235.79	
		26	6235.76	
		29	6249.70	
		30	6249.69	
		7	1	6249.69
			2	6249.69
			3	6249.70
			4	6249.70
			5	6249.70
			6	6249.70
			7	6249.70
			8	6249.70
			9	6249.69
			10	6249.70
			11	6249.70
			12	6249.69
			13	6249.70
			14	6249.70
		15	6249.69	
	16	6249.69		
	17	6249.69		
	18	6249.70		
	19	6249.70		
	20	6249.70		
	21	6249.70		
	22	6249.70		
	23	6249.70		
	24	6249.69		
	25	6249.69		
	26	6249.69		
	27	6249.70		
	28	6249.70		
	29	6249.70		

TABLE 1.2.1.4-14 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
 FOR SAMPLE DATE SHOWN

WG - LPC3

WH - LPC4

YR	MO	DY	WG12
			DEPTH (FT)
84	7	30	6254.66
		31	6254.66
	8	1	6254.66
		2	6254.67
		3	6254.66
		4	6254.67
		5	6254.67
		6	6254.67
		7	6254.68
		8	6254.68
		9	6254.68
		10	6254.68
		11	6254.68
		12	6254.69
		13	6254.69
		14	6254.69
		15	6254.69
		16	6254.69
		17	6254.69
		18	6254.69
		19	6254.69
		20	6254.69
		21	6254.69
		22	6254.69
		23	6254.69
		24	6254.69
		25	6254.69
		26	6254.69
		27	6254.69
		28	6254.69
		29	6254.69
		30	6254.69
		31	6254.69
	9	1	6254.69
		2	6254.69
		3	6254.85
		4	6254.85
		5	6254.85
		6	6254.85
		7	6254.85
		8	6254.85
		9	6254.85
		10	6254.85
		11	6254.85

TABLE 1.2.1.4-14 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
 FOR SAMPLE DATE SHOWN

WG - LPC3

WH - LPC4

YR	MO	DY	WG12 DEPTH (FT)
<hr/>			
84	9	12	6254.85
		13	6254.85
		14	6254.85
		15	6254.85
		16	6254.85
		17	6254.85
		18	6254.85
		19	6254.85
		20	6254.85
		21	6254.84
		22	6254.84
		23	6254.84
		24	6254.84
		25	6254.84
		26	6254.84
		27	6254.84
		28	6254.81
		29	6254.80
		30	6254.80
	10	1	6254.80
		2	6254.80
		3	6254.80
		4	6254.80
		5	6254.80
		6	6254.79
		7	6254.79
		8	6254.78
		9	6254.78
		10	6254.78
		11	6254.78
		12	6254.78
		13	6254.78
		14	6254.77
		15	6254.77
		16	6254.77
		17	6254.77
		18	6254.77
		19	6254.77
		20	6254.77
		21	6254.77
		22	6254.77
		23	6254.76
		24	6254.75
		25	6254.75

TABLE 1.2.1.4-14 (cont'd)

CB-TRACT
 STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
 FOR SAMPLE DATE SHOWN

WG - LPC3

WH - LPC4

YR	MO	DY	WG12
			DEPTH (FT)
84	10	26	6254.75
		27	6254.73
		28	6254.72
		29	6254.72
		30	6254.70
		31	6254.70
11		1	6254.68
		2	6254.68
		3	6254.67
		4	6254.66
		5	6254.65
		6	6254.65
		7	6254.65
		8	6254.65
		9	6254.63
		10	6254.62
		11	6254.61
		12	6254.59
		13	6254.59
		14	6254.57
		15	6254.56
		16	6254.55
		17	6254.55
		18	6254.53
		19	6254.51
		20	6254.50
		21	6254.49
		22	6254.49
		23	6254.50
		24	6254.50
		25	6254.49
		26	6254.48
		27	6254.48
		28	6254.48

TABLE 1.2.1.4-15

LIST OF BEDROCK WELL LEVELS TIME SERIES PLOTS

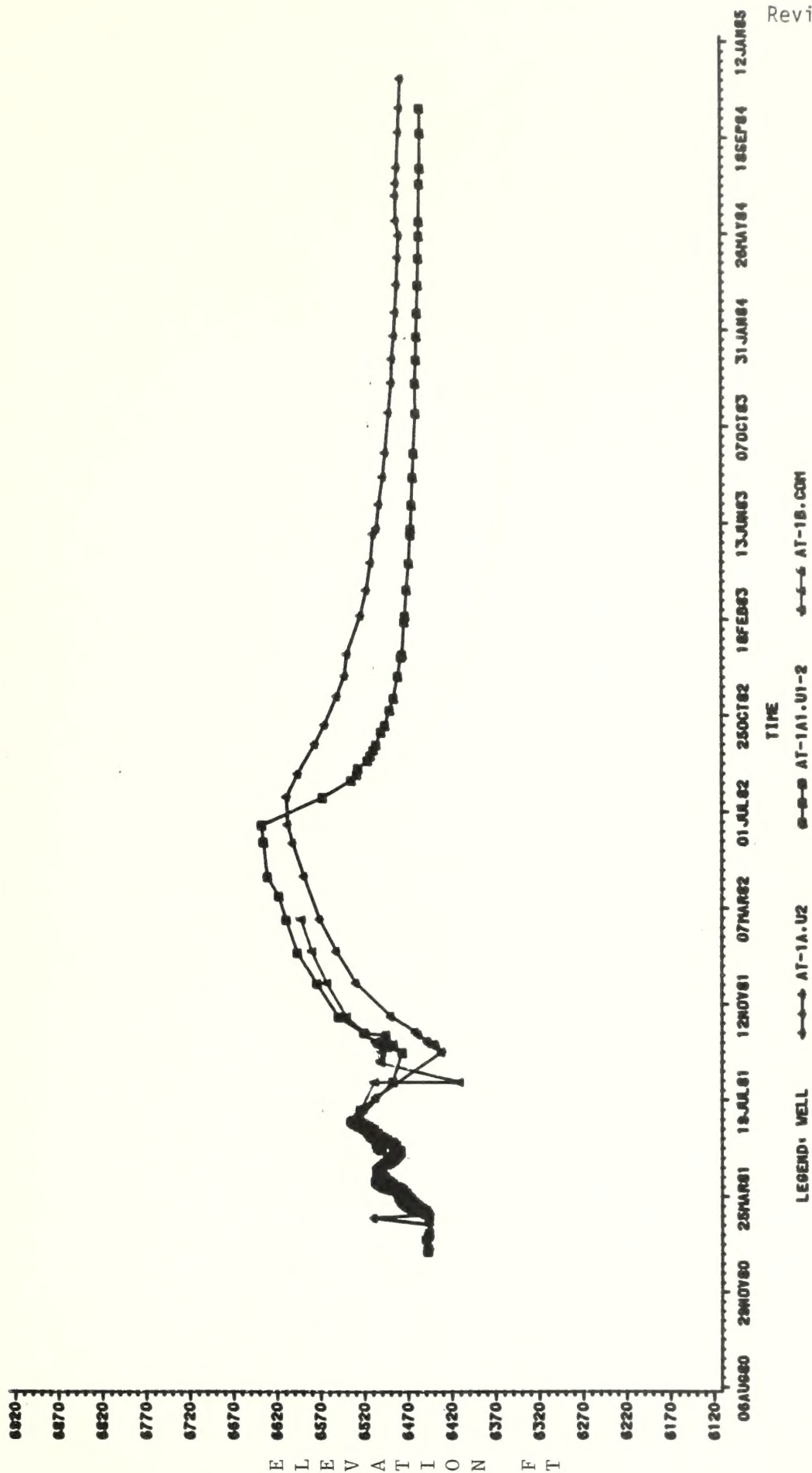
<u>Well</u>	<u>Computer Code</u>	<u>Page No.</u>
AT-1A	WV37	I-134
AT-1A-1	WX38	I-134
AT-1B	WV40	I-134
AT-1C-1	WY45	I-135
AT-1C-2	WY46	I-135
AT-1C-3	WX44	I-135
AT-1	WY44	I-136
AT-1D-1	WG41	I-136
AT-1D-2	WE41	I-136
AT-1D-3	WD41	I-136
CB-1	WD01	I-137
CB-2	WD02	I-138
CB-3	WE03	I-138
SG-19	WD19	I-138
CB-4	WE04	I-139
SG-10	WD90	I-139
SG-17A	WD57	I-139
31X12	WW22	I-139
41X13	WW13	I-139
32Y12	WW32	I-140
SG-1A-1	WE11	I-141
SG-1A-2	WD11	I-141
SG-1-1	WG12	I-142
SG-1-2	WD12	I-142
SG-6-1	WE61	I-143
SG-6-2	WG61	I-143
SG-6-3	WD61	I-143
SG-8R	WY81	I-144
SG-9-1	WG91	I-145
SG-9-2	WE91	I-145
SG-9-3	WD91	I-145
SG-9-4	WC91	I-145
SG-10A-Annulus	WD51	I-146
SG-10A-1	WG51	I-146
SG-10A-2	WE51	I-146
SG-11-1	WG52	I-147
SG-11-2	WE52	I-147
SG-11-3	WD52	I-147

TABLE 1.2.1.4-15 (Contd)

LIST OF BEDROCK WELL LEVELS TIME SERIES PLOTS

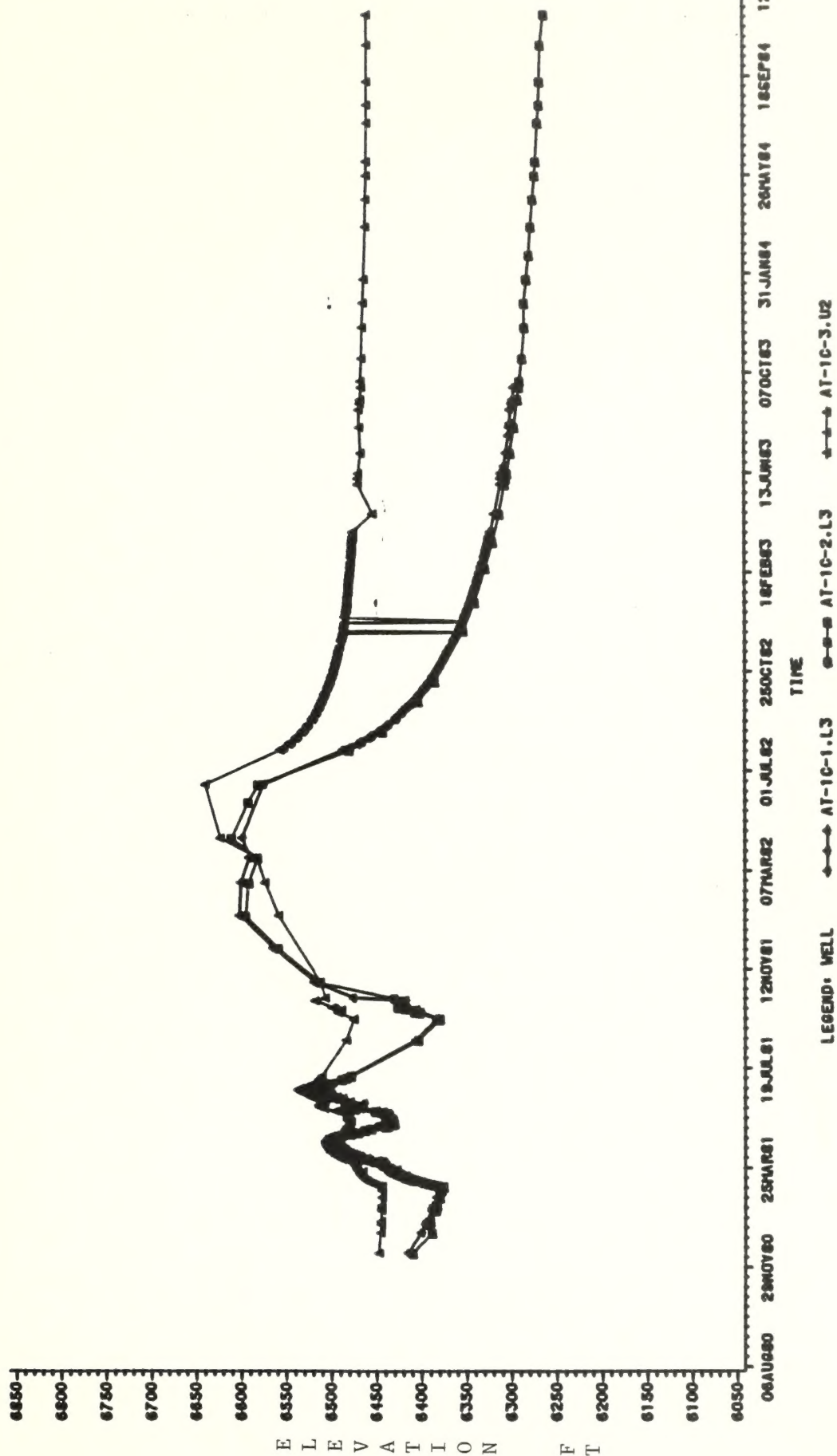
<u>Well</u>	<u>Computer Code</u>	<u>Page No.</u>
SG-17-1	WE17	I-148
SG-17-2	WG17	I-148
SG-17-3	WD17	I-148
SG-17-4	WC17	I-148
SG-18A-1	WG18	I-149
SG-18A-2	WE18	I-149
SG-18A-3	WD18	I-149
SG-20-2	WE20	I-150
SG-20-3	WD20	I-150
SG-21-1	WH21	I-151
SG-21-2	WG21	I-151
SG-21-3	WE21	I-151
SG-21-4	WD21	I-151
14X-7-1	WD14	I-152
14X-7-2	WD15	I-152
21X-12 1	WG23	I-153
21X-12-2	WC23	I-154
22X-1-2	WD22	I-155
22X-1-3	WC22	I-156
32X12	WX32	I-157
43X-2-1	WG43	I-158
43X-2-2	WE43	I-159
B-102-3-1	WC03	I-160
B-102-3-2	WB03	I-161

CB WELL LEVELS DATA



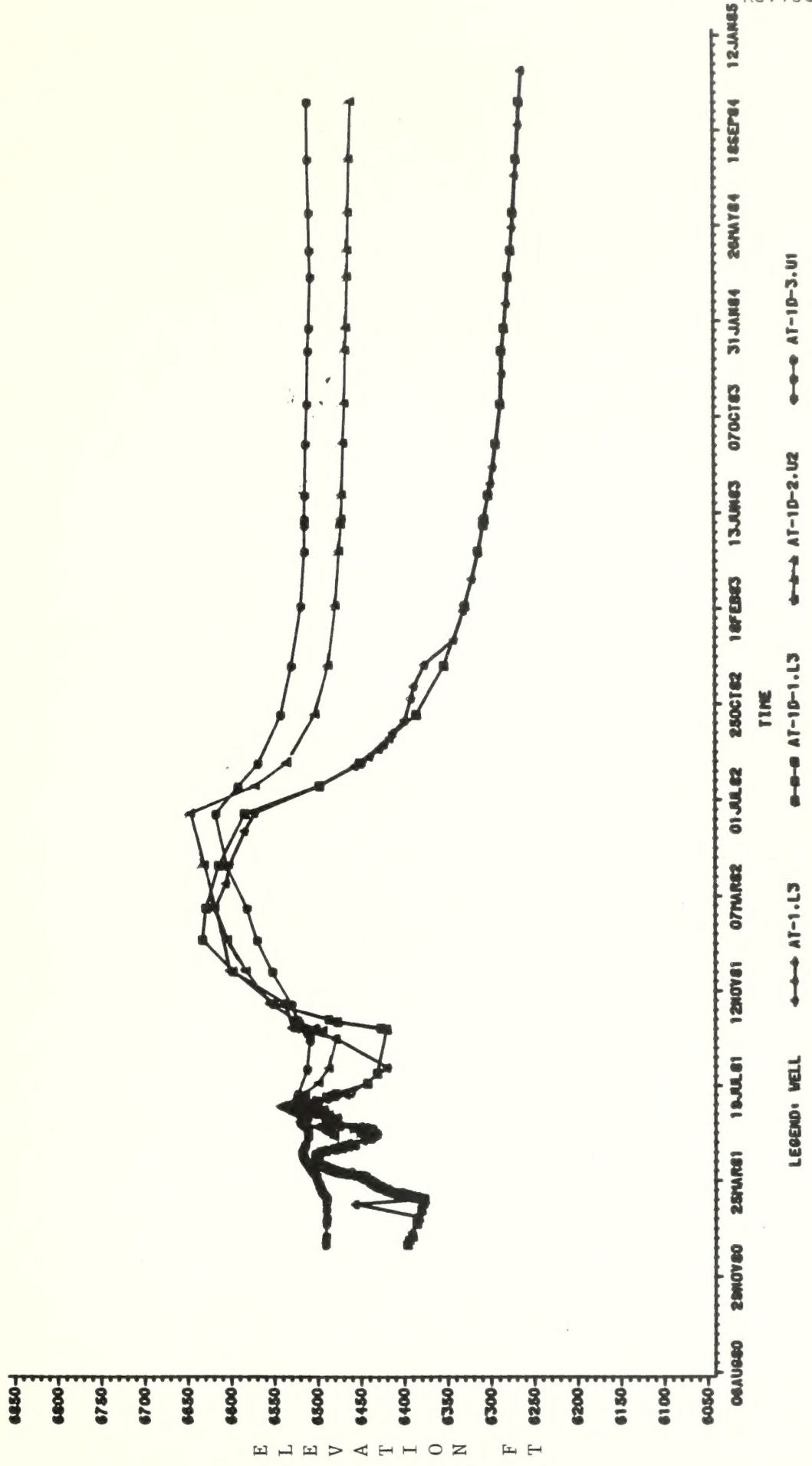
LEGEND: WELL AT-1A.U2 AT-1A.U1-2

CB WELL LEVELS DATA



Revised 3/11/85

CB WELL LEVELS DATA

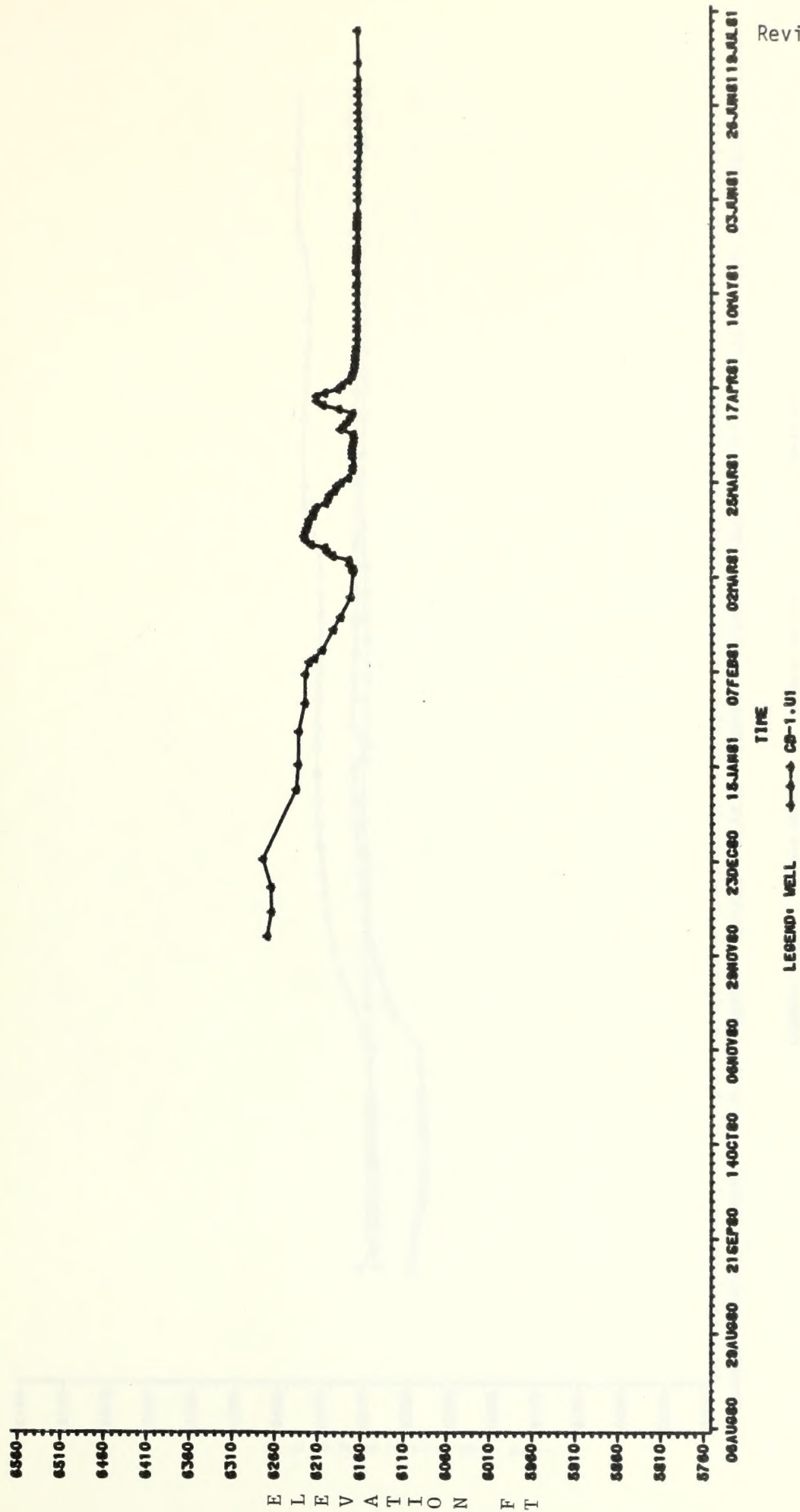


DATE: 10-22-68
TIME: 10:00 AM
BY: J. L. [illegible]
TO: [illegible]
FROM: [illegible]
SUBJECT: [illegible]



CB TEST RESULTS

CB WELL LEVELS DATA

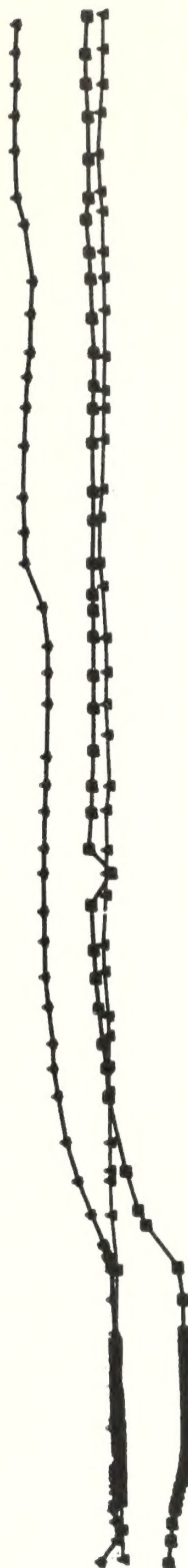


Revised 3/11/85

CB WELL LEVELS DATA

6750
6700
6650
6600
6550
6500
6450
6400
6350
6300
6250
6200
6150
6100
6050
6000
5950

E
L
E
V
A
T
I
O
N
F
T

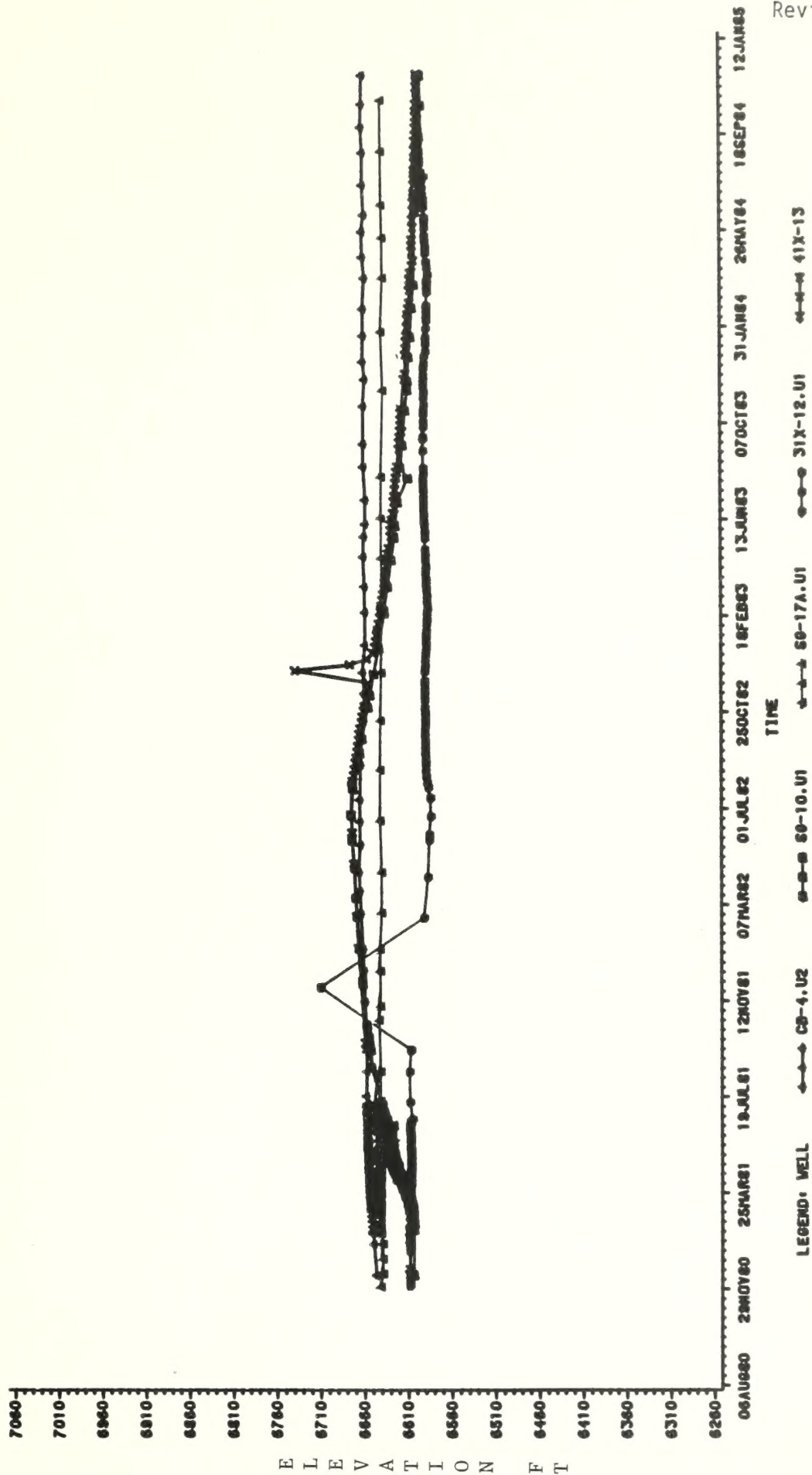


06AUG80 28NOV80 25MAR81 19JUL81 12NOV81 07MAR82 01JUL82 28OCT82 18FEB83 13JUN83 07OCT83 31JAN84 26MAY84 18SEP84 12JAN85

TIME

LEGEND: WELL ←→ CB-2.U1 ←→ CB-3.U2 ←→ 50-19.U1

CB WELL LEVELS DATA



ATMOSPHERIC PRESSURE

Station

Date

Time

Observer

Instrument

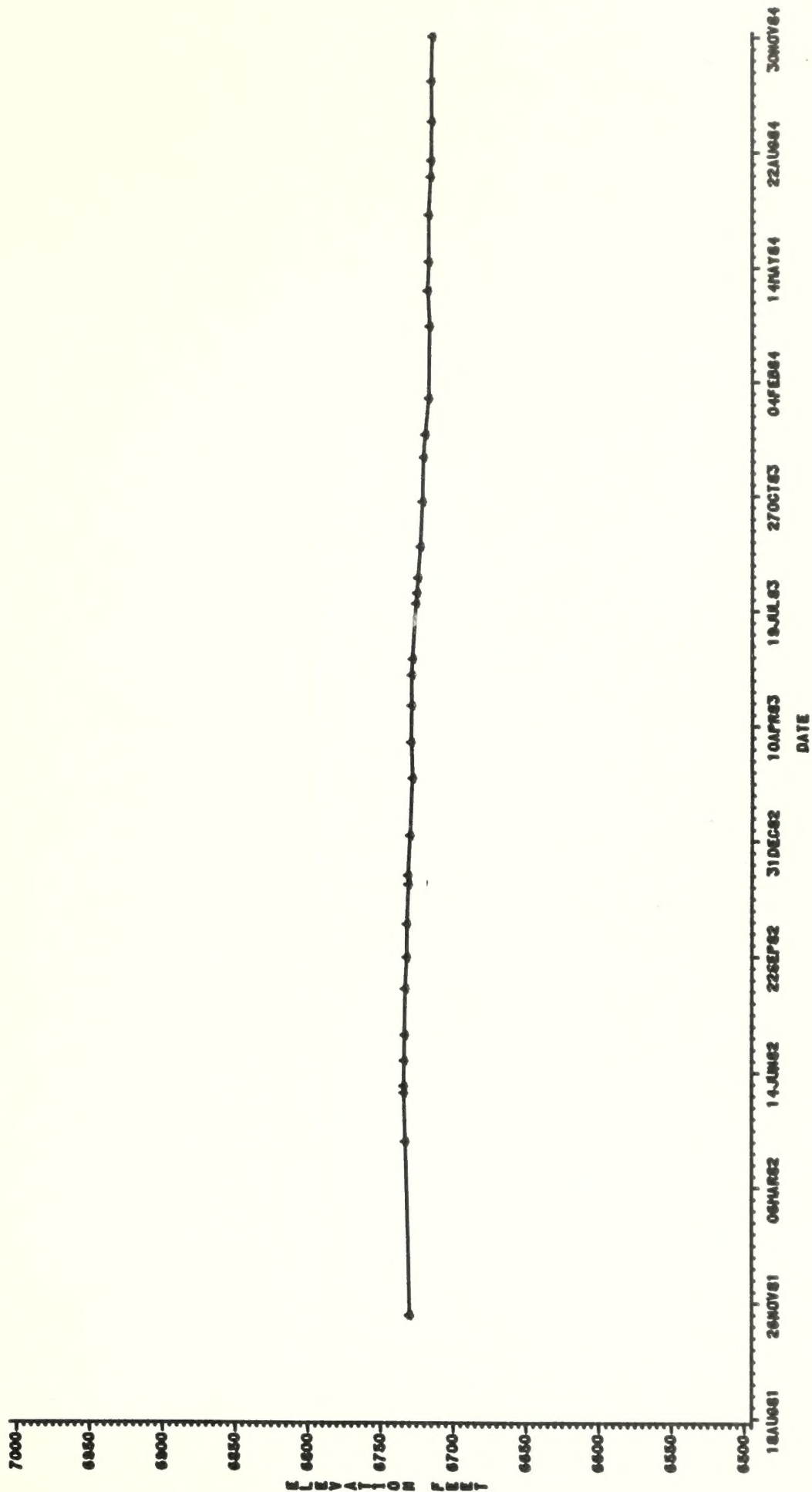
Remarks

Barometer reduced to sea level (if necessary) _____



TIME SERIES OF SEEPAGE MONITORING WELL (WW32) SAMPLES

LOC-W02



100



THE EFFECT OF TEMPERATURE ON THE RATE OF REACTION

CB WELL LEVELS DATA

6730
6480
6430
6380
6330
6280
6230
6180
6130
6080
6030
5980
5930

ELEVATION FT

I - 141



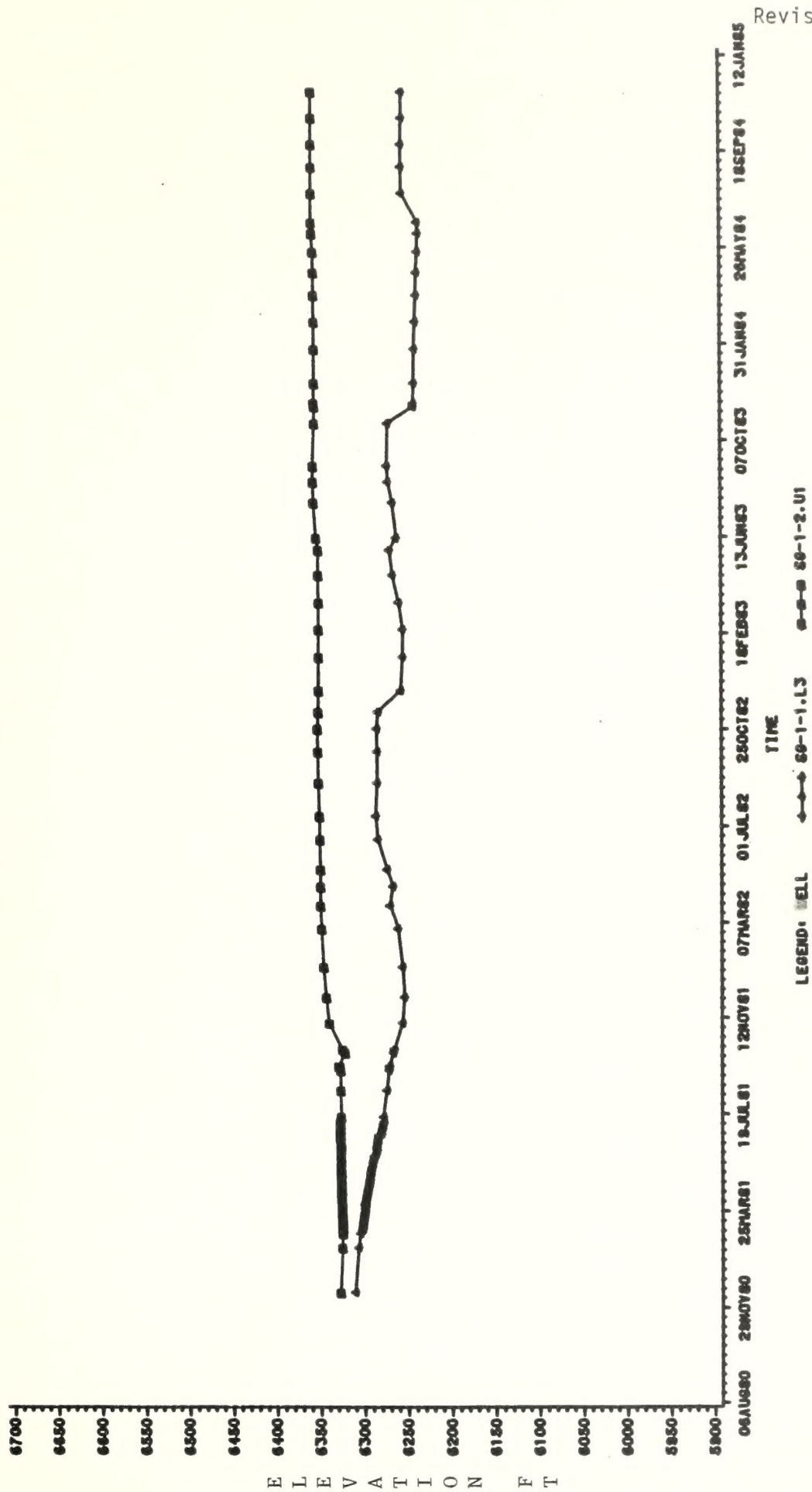
28NOV80 07FEB81 17APR81 26JUN81 03SEP81 12NOV81 20JAN82 31MAR82 08JUN82 16AUG82 25OCT82 02JAN83 13MAR83 21MAY83 30JUL83 07OCT83 16DEC83 23FEB84 02MAY84

TIME

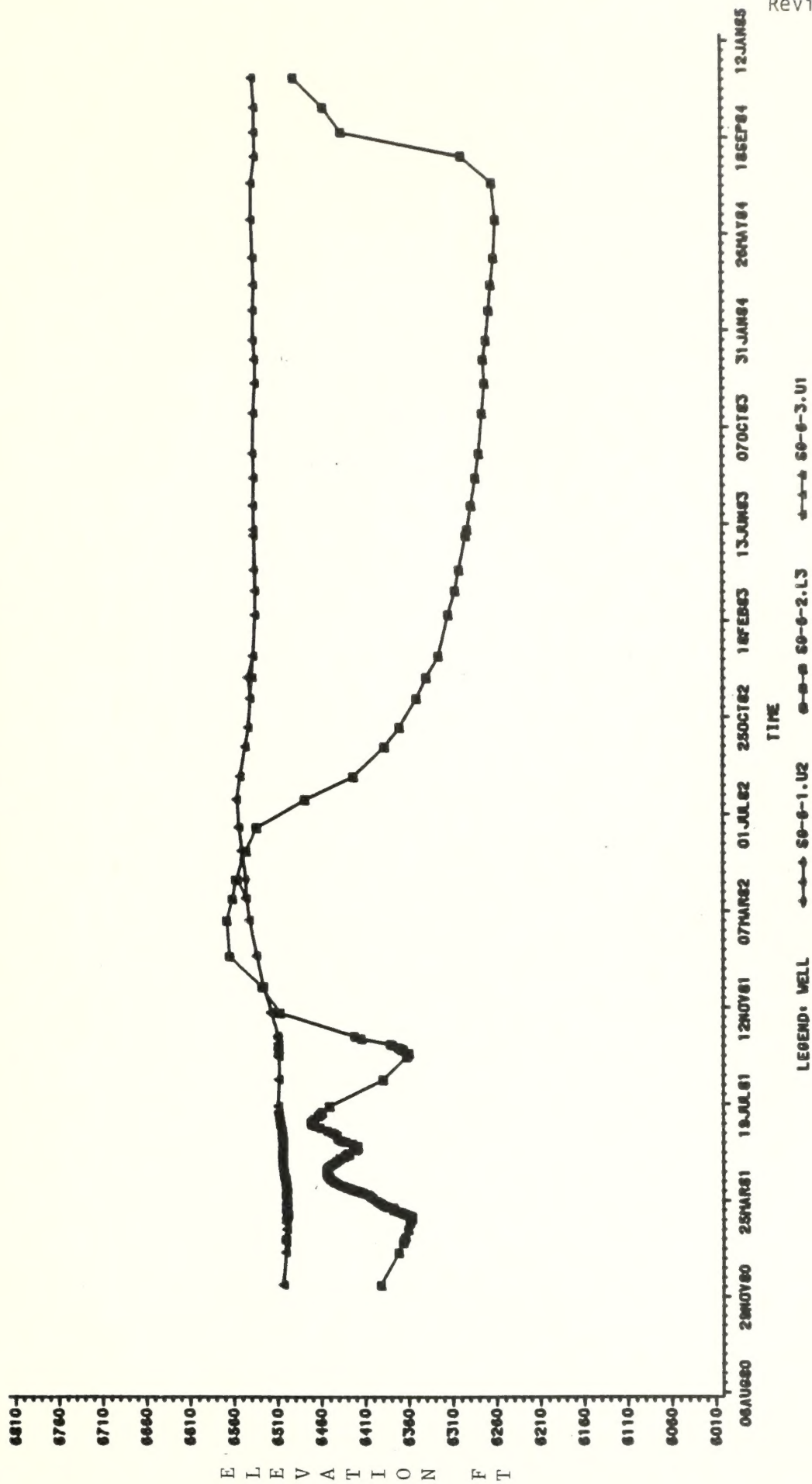
LEGEND: WELL → 60-1A-1.U2 60-1A-2.U1

Revised 3/11/85

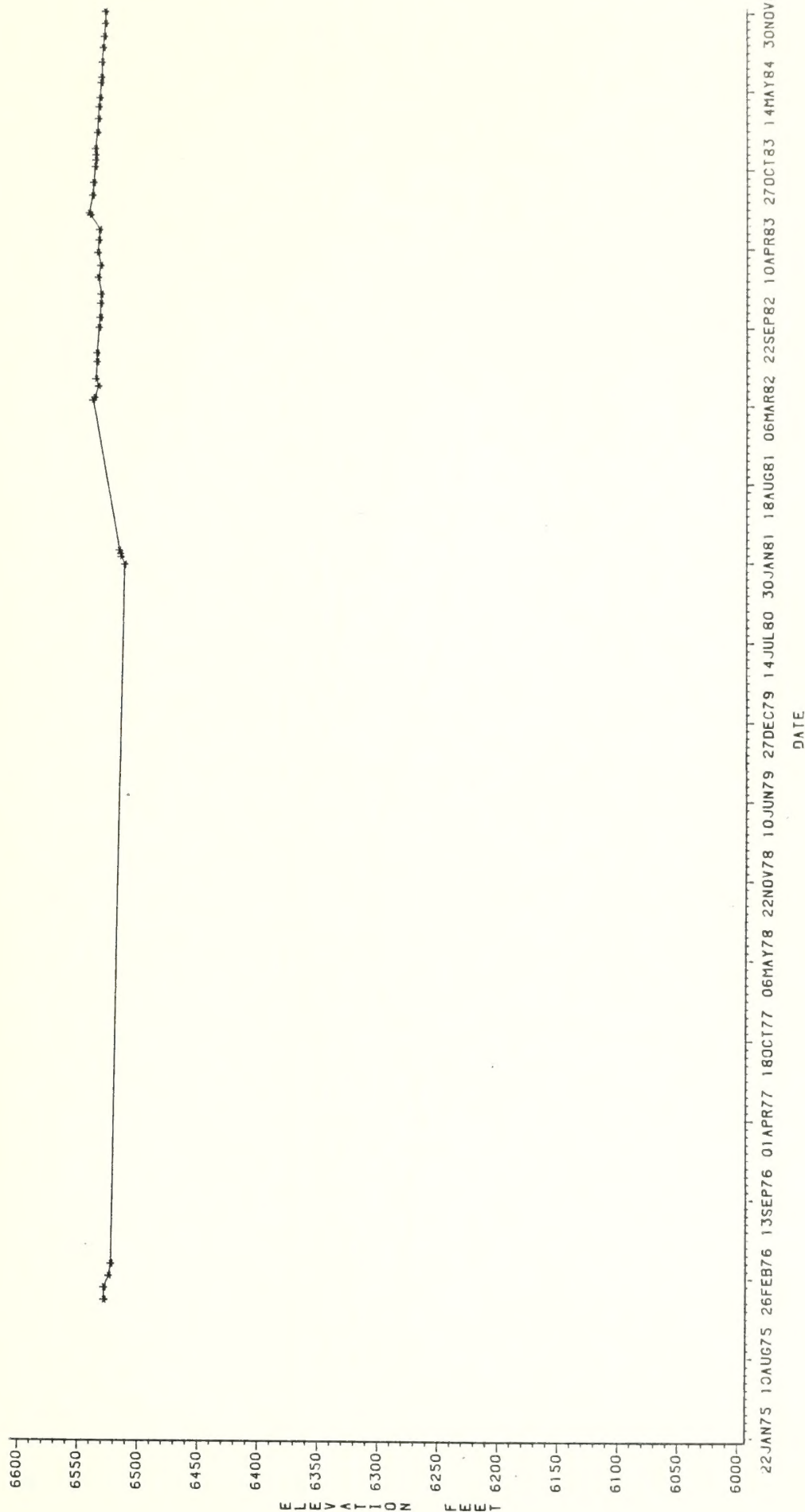
CB WELL LEVELS DATA



CB WELL LEVELS DATA

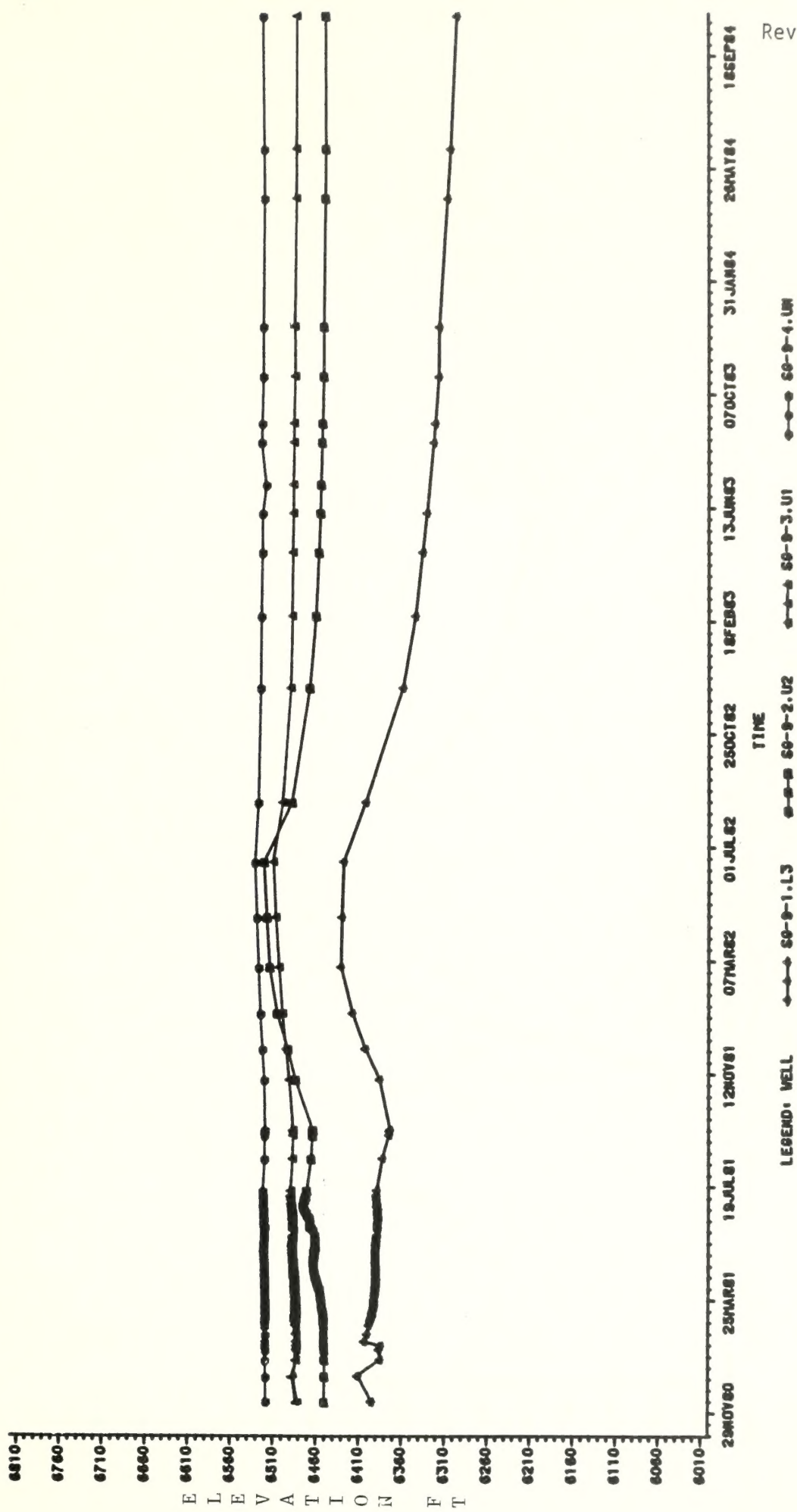


C-B WELL LEVELS



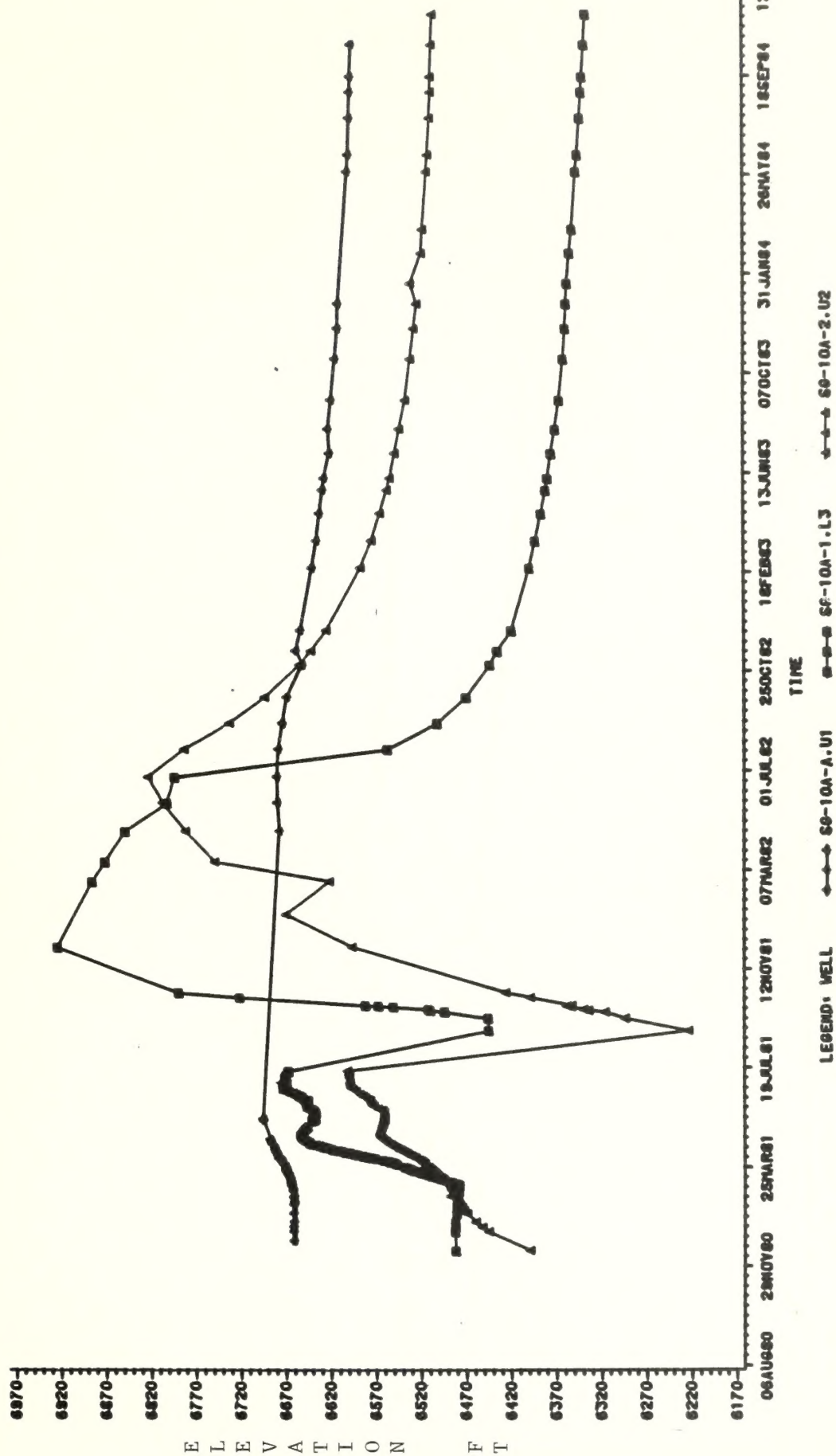
DATE
WY81 (SG-8R)

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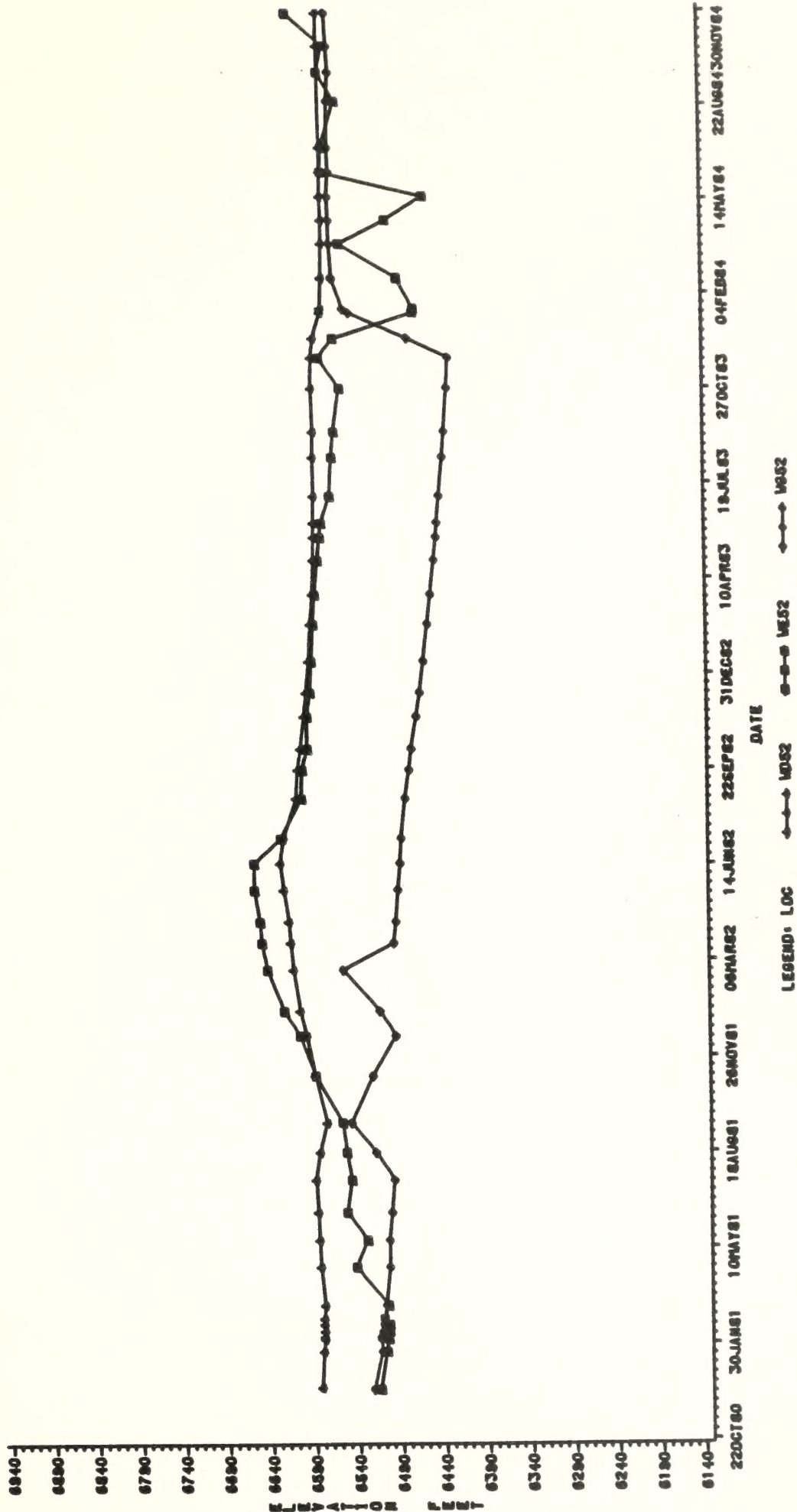


Revised 3/11/85

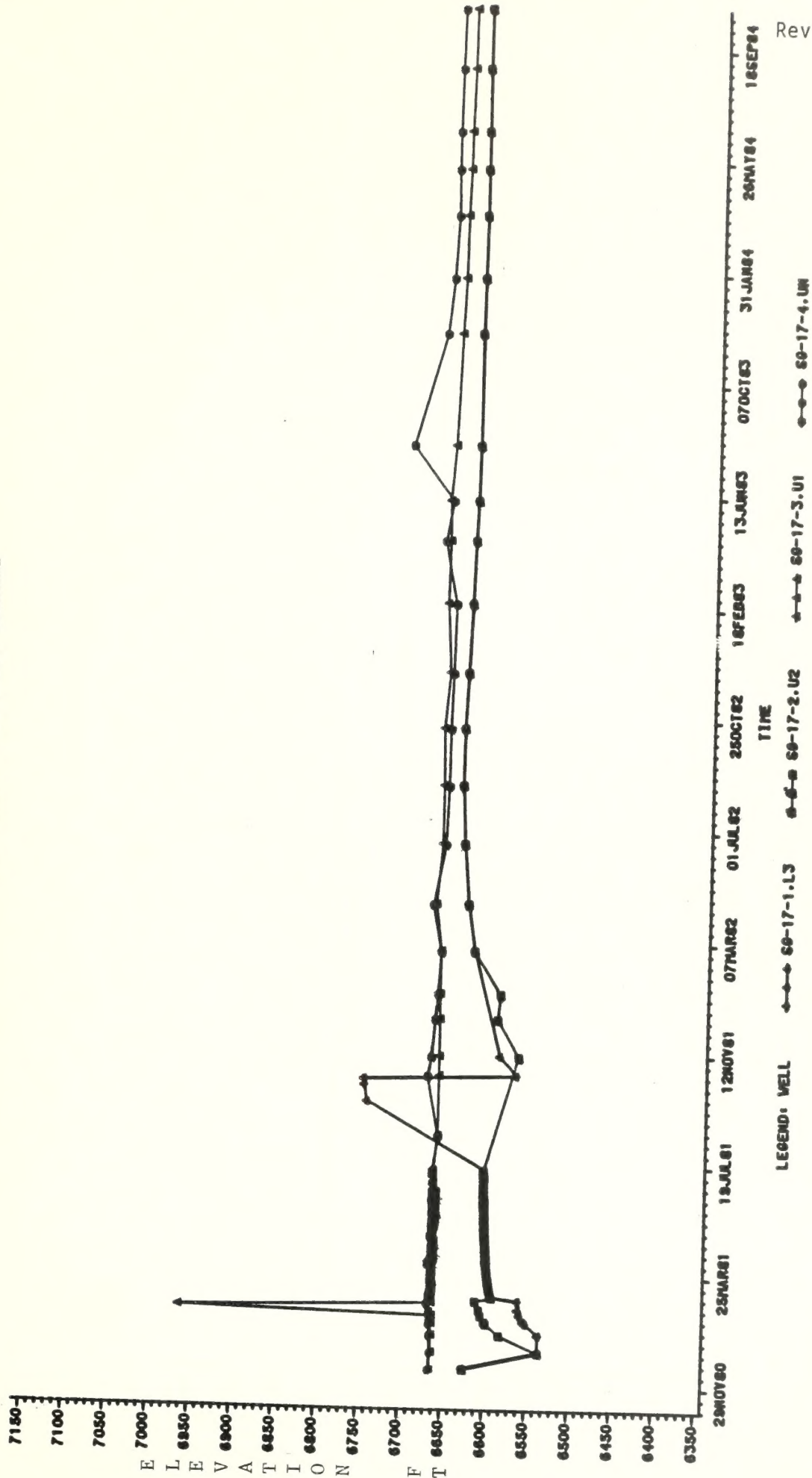
CB WELL LEVELS DATA



C-B WELL LEVELS



CB WELL LEVELS DATA



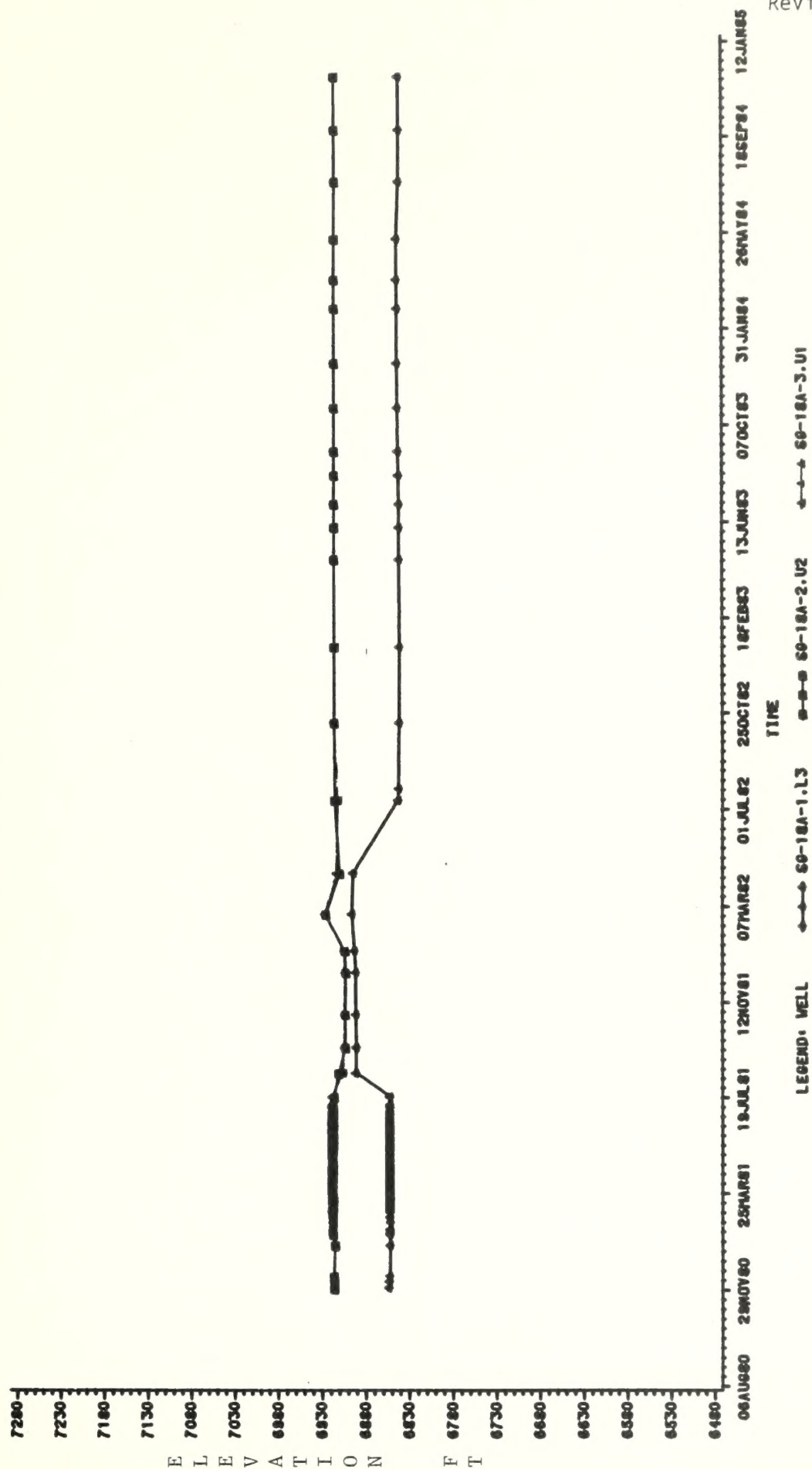
Revised 3/11/85

10-11-77 10:00 AM



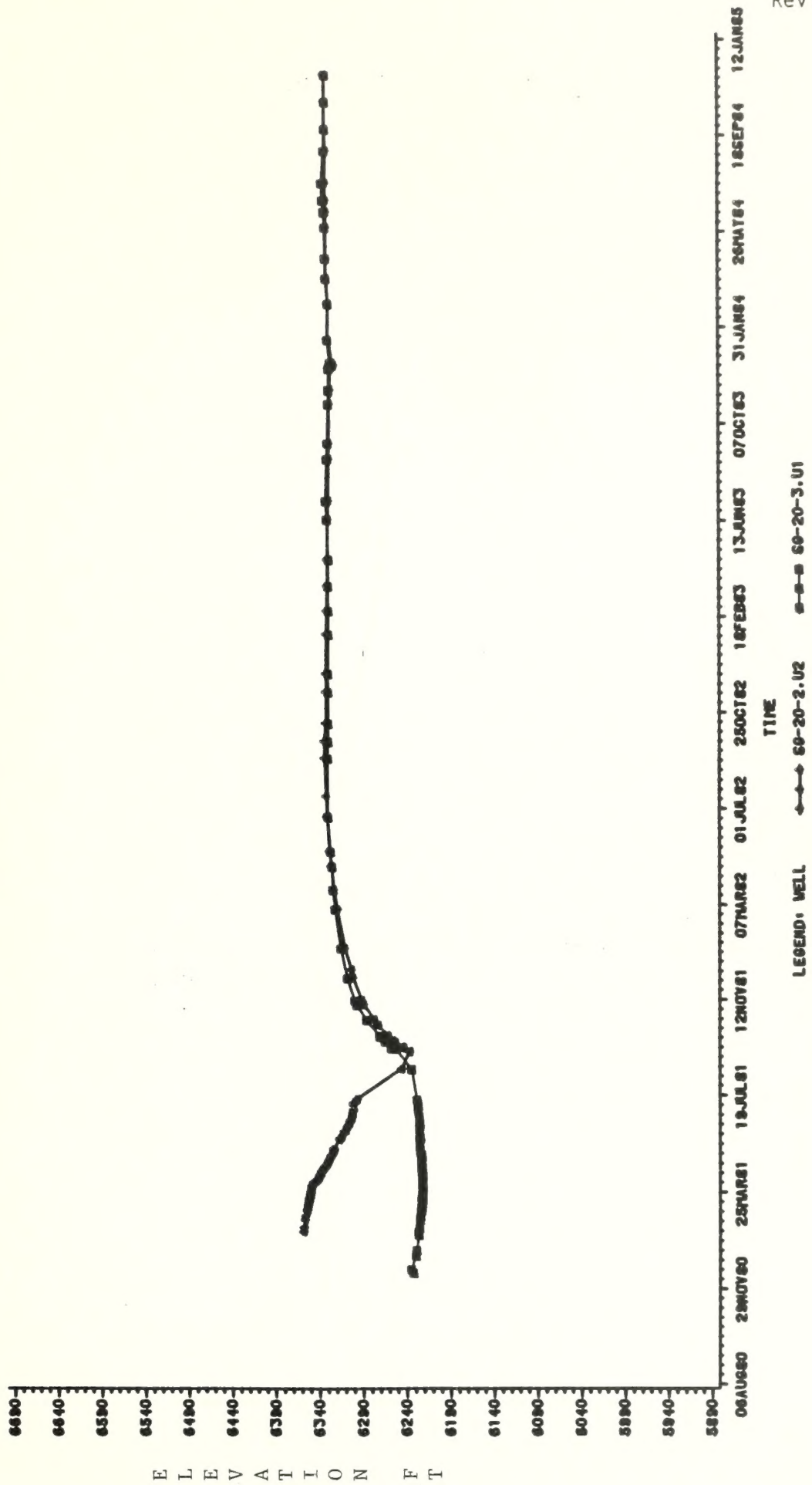
10-11-77 10:00 AM

CB WELL LEVELS DATA

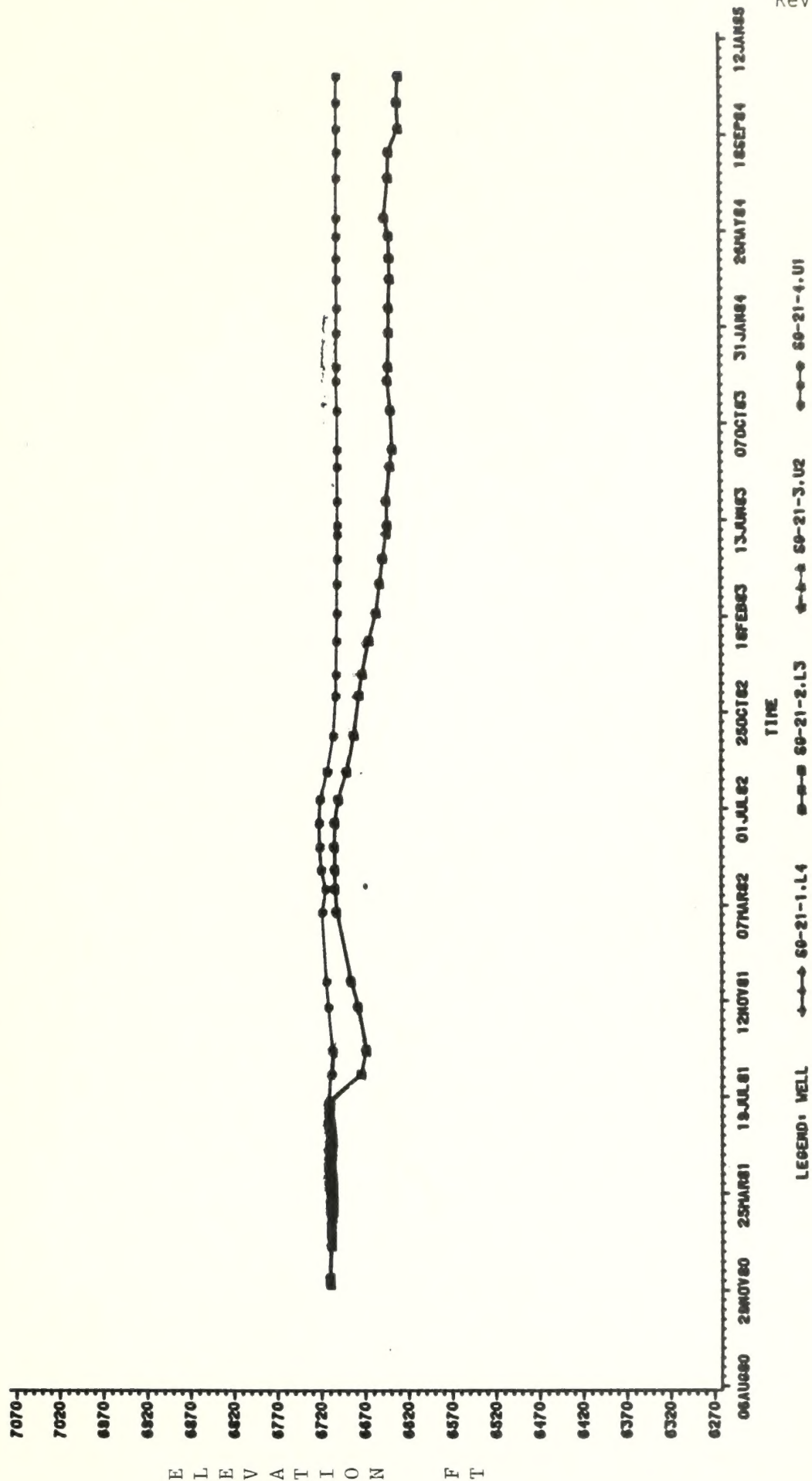


Revised 3/11/85

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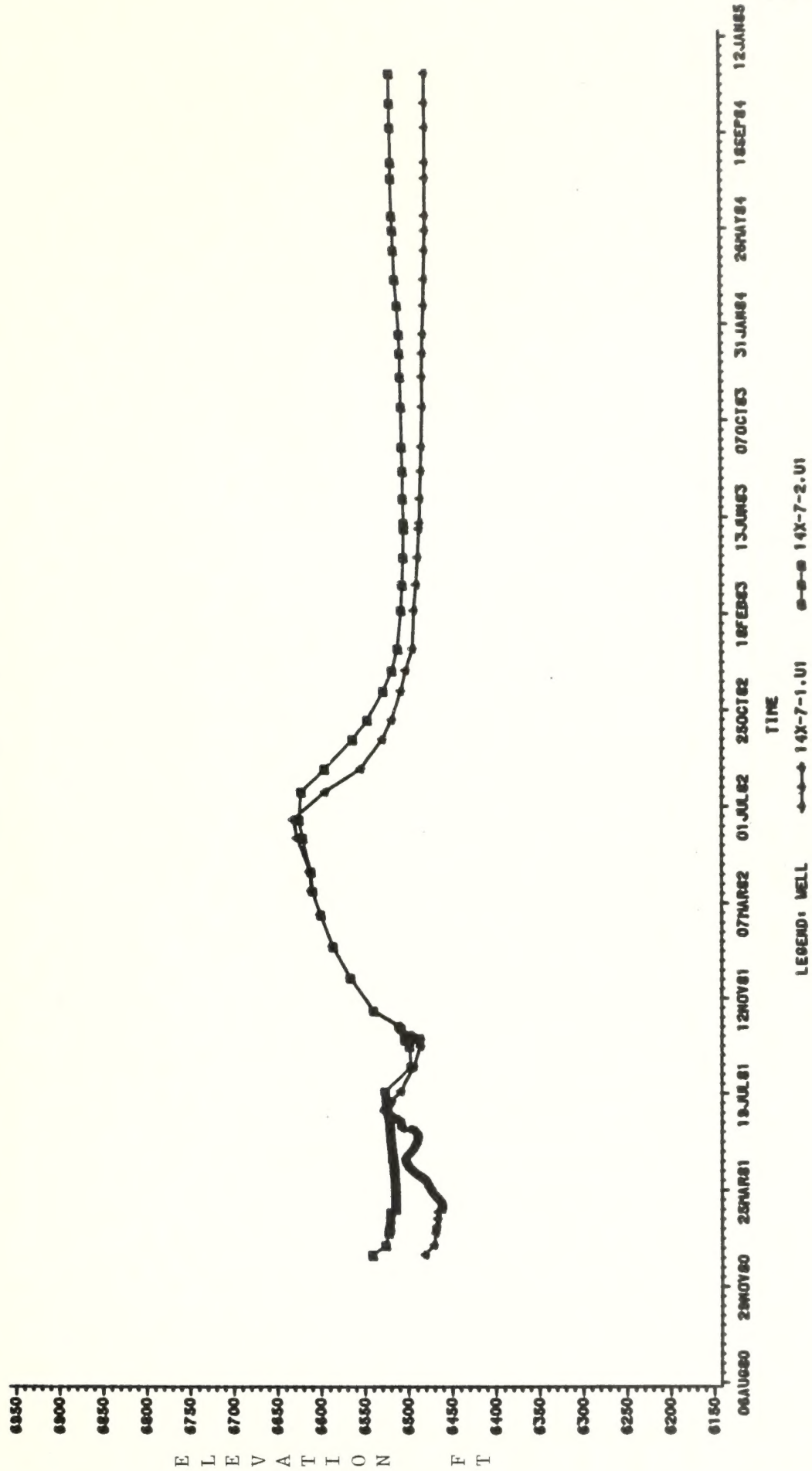
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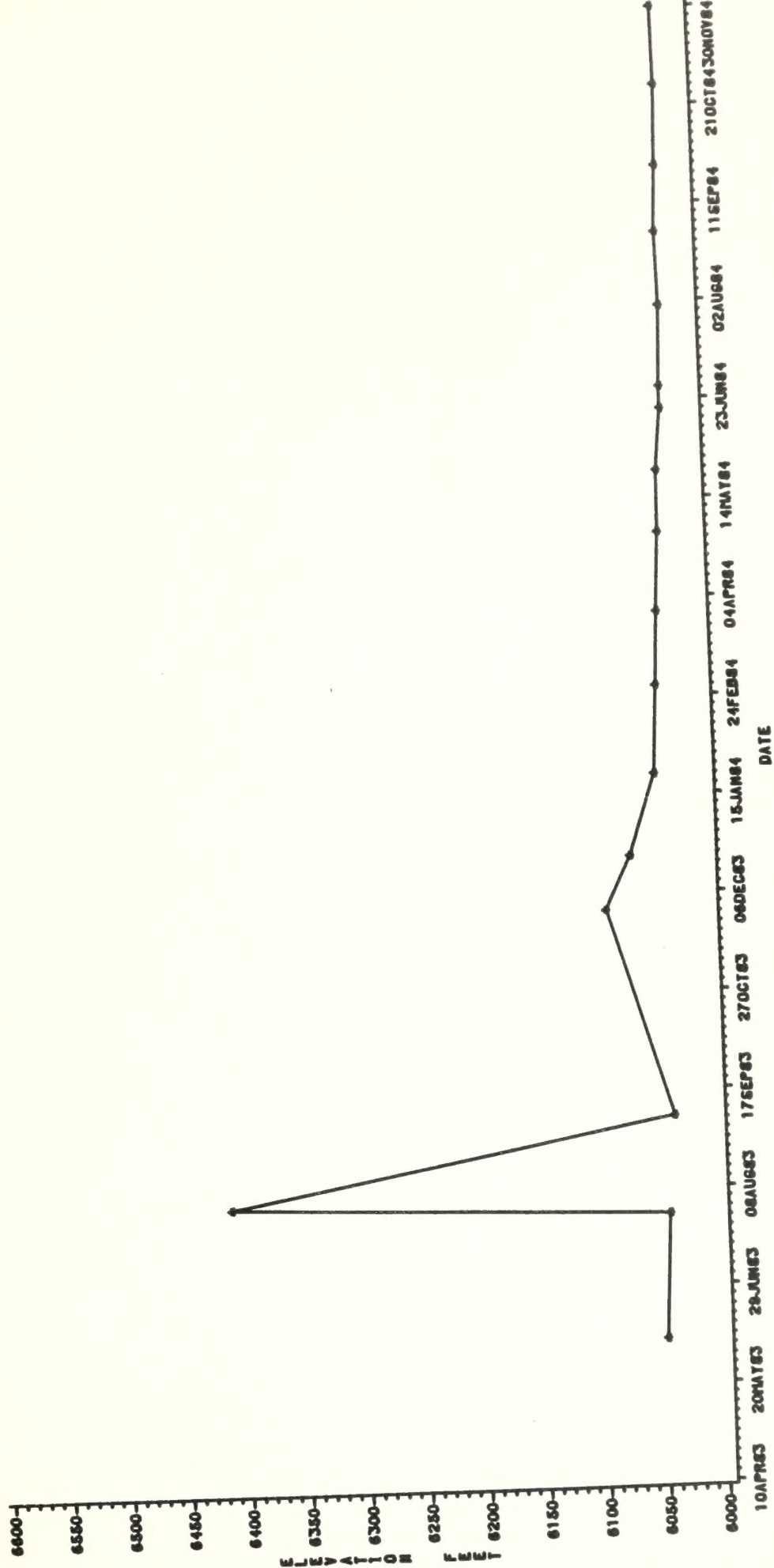
Revised 3/11/85

LEGEND: WELL TIME

CB WELL LEVELS DATA



C-B WELL LEVELS LOC-1623

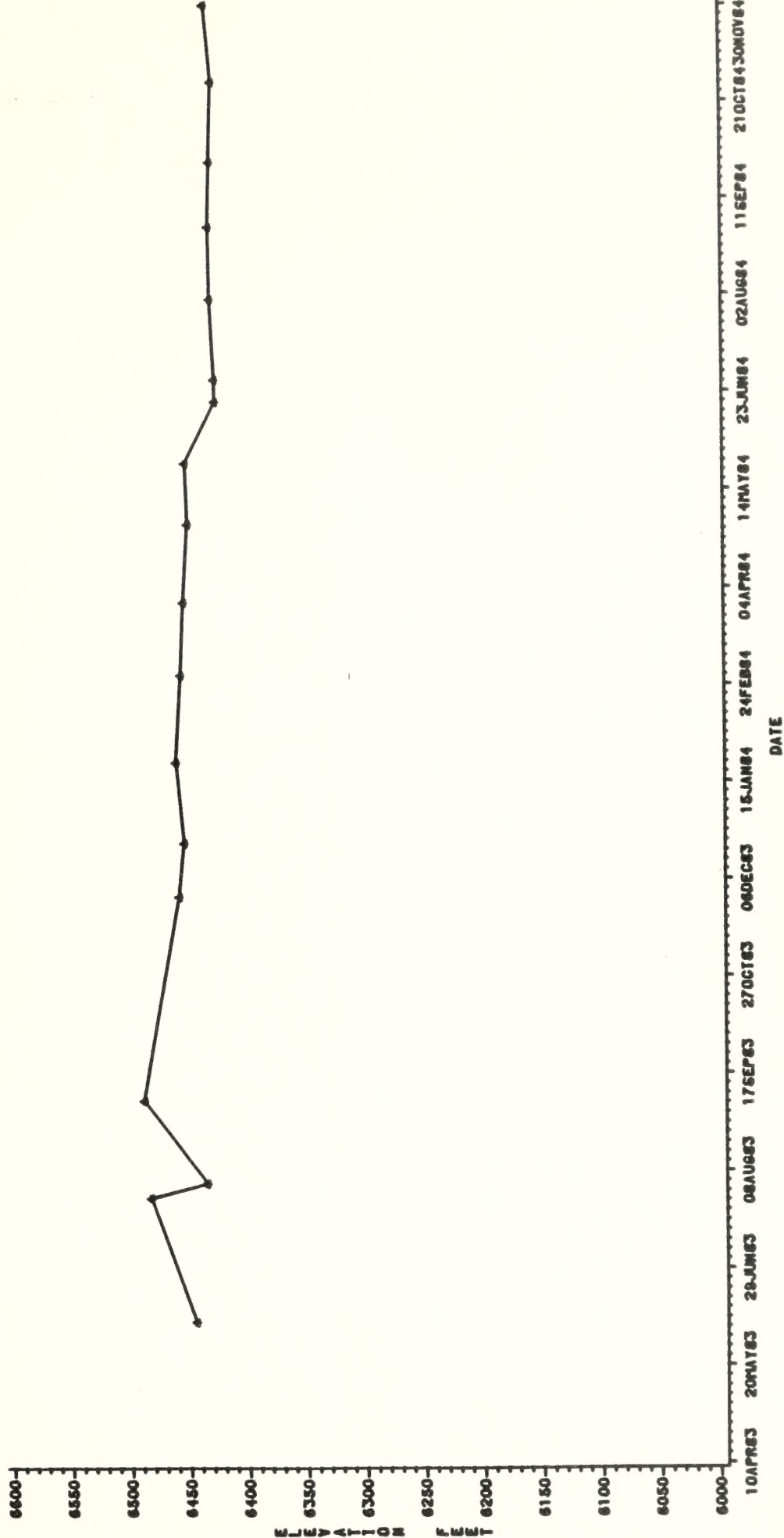


10.14



C-8 ART TRACT

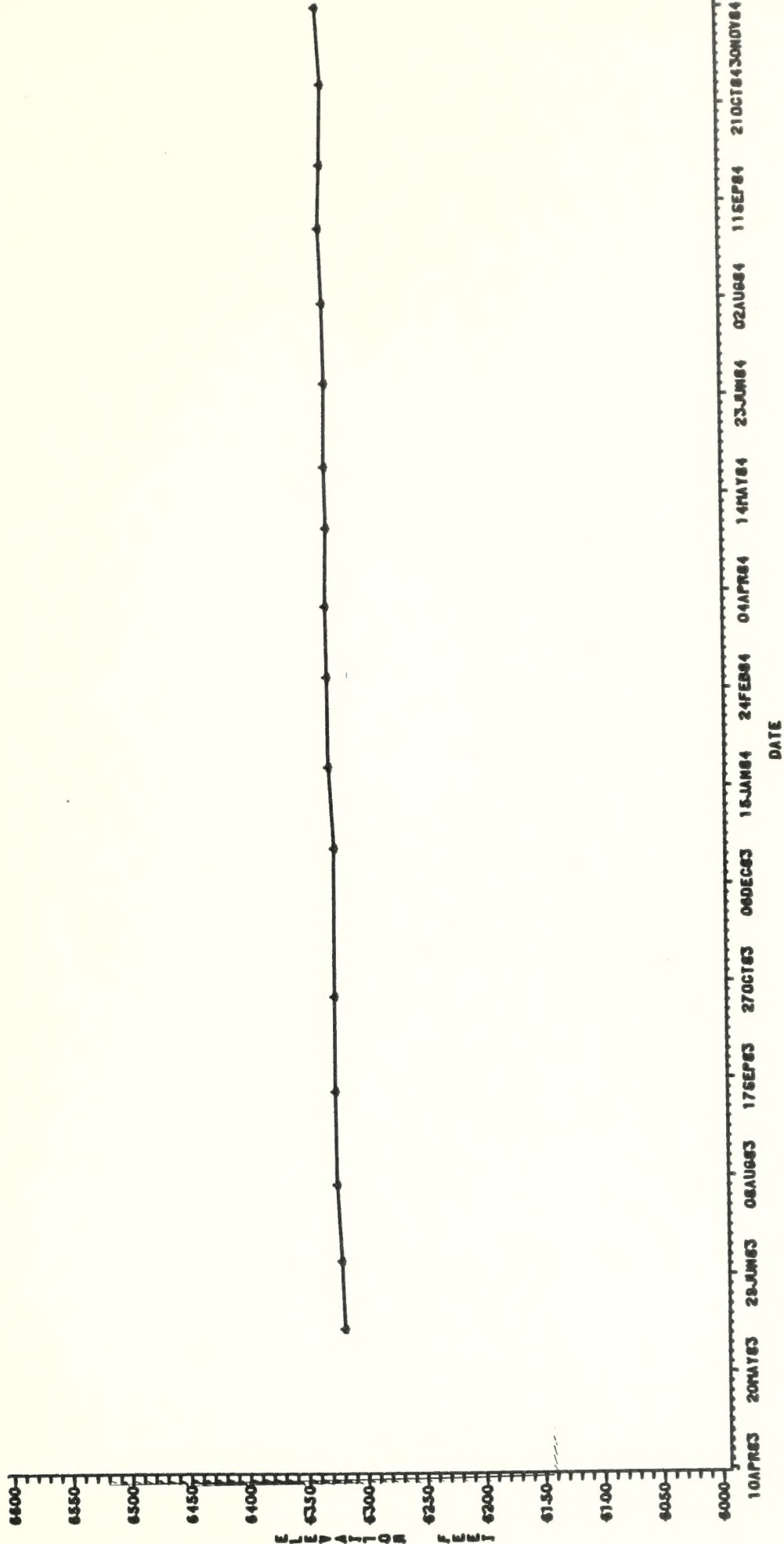
C-B WELL LEVELS LOC-WC23



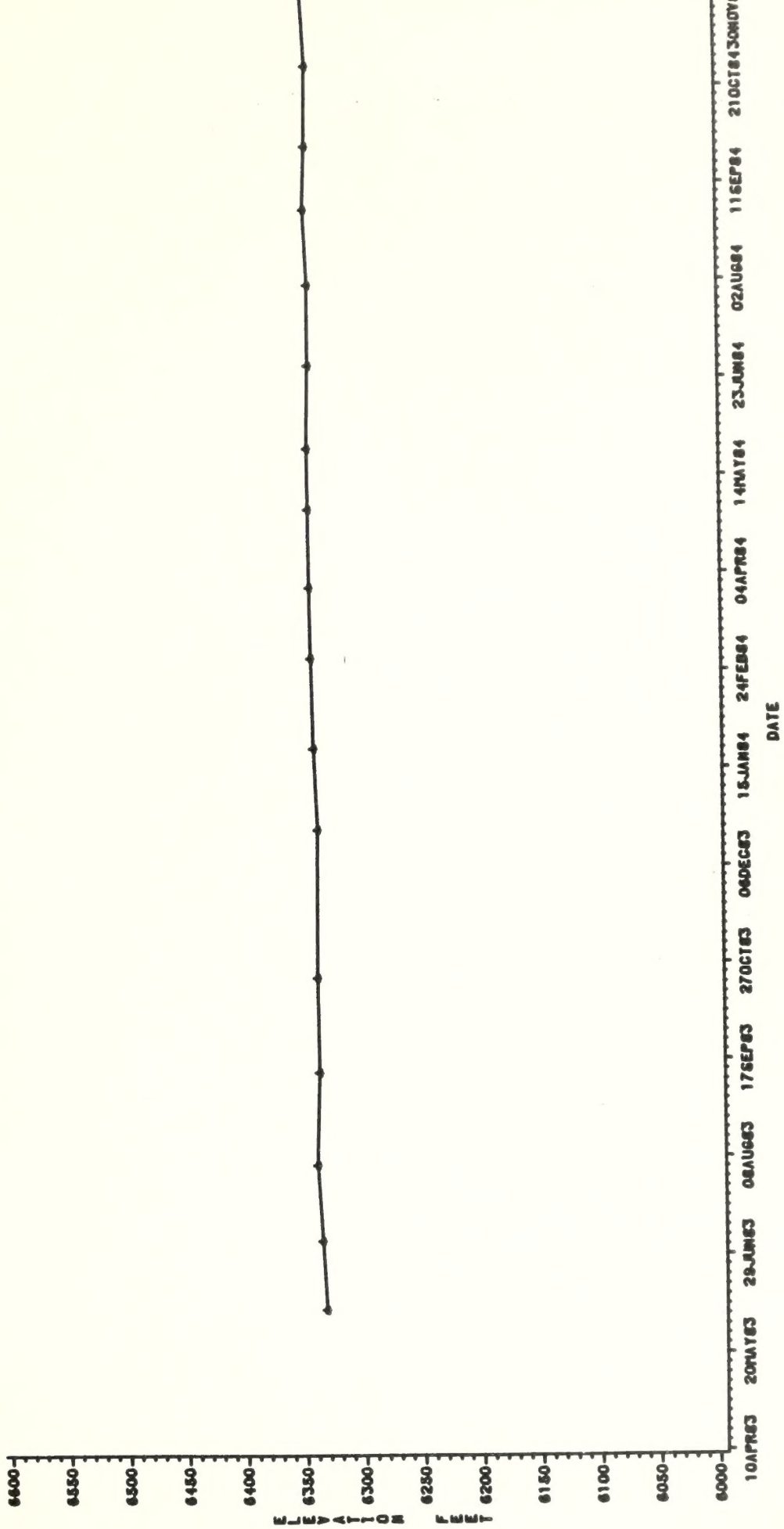


C-B JET TRAILS

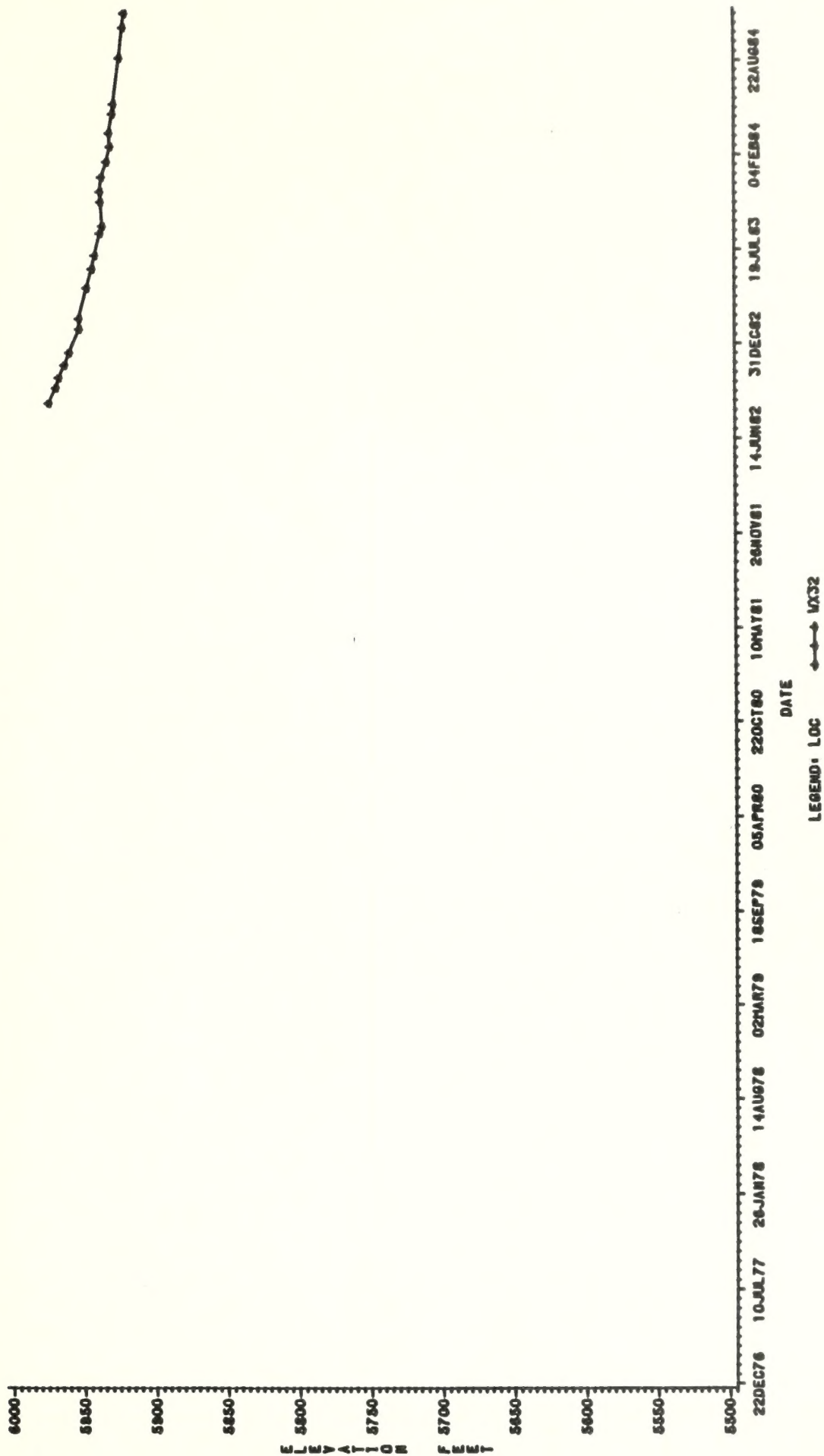
C-B WELL LEVELS LOC-1022



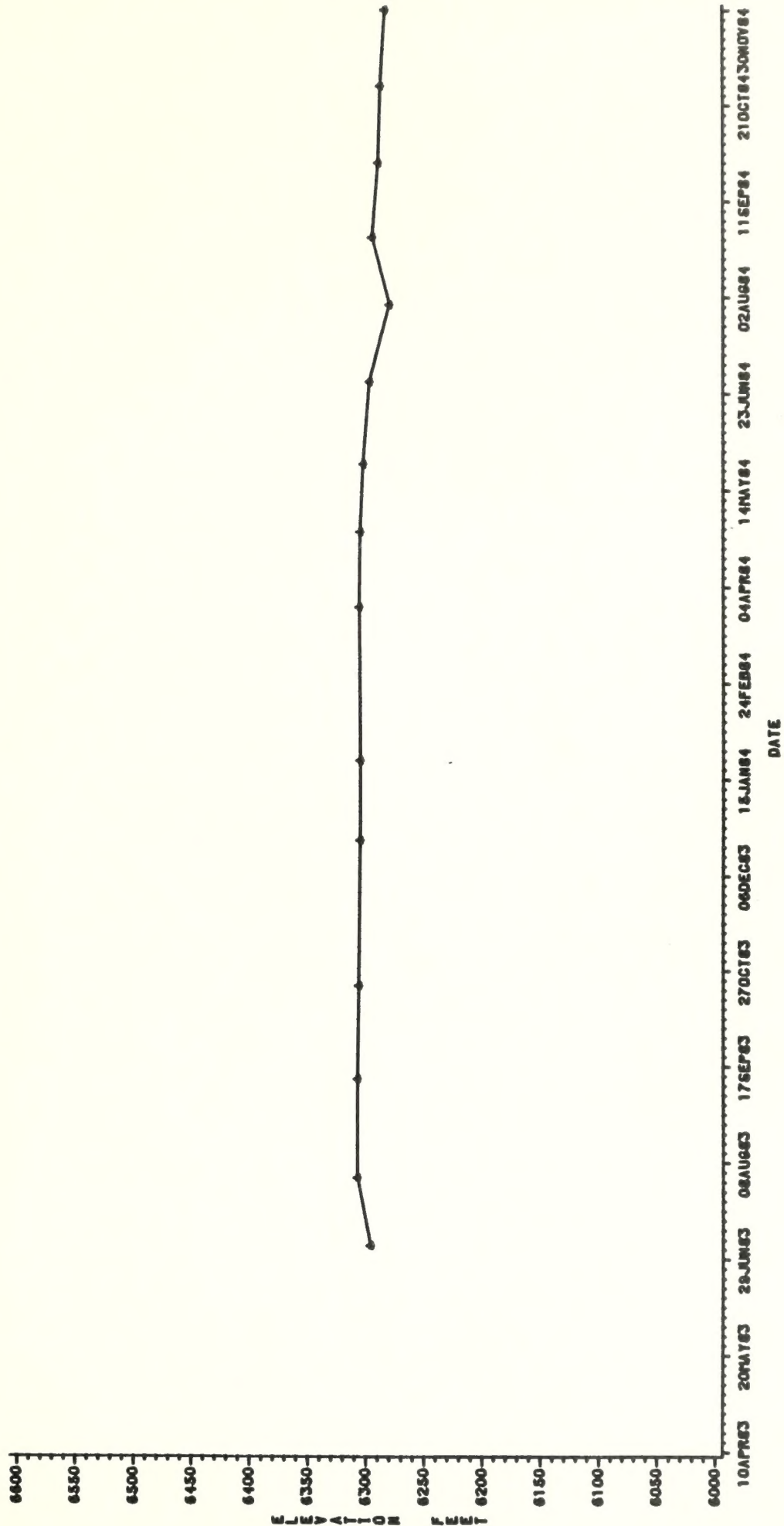
C-B WELL LEVELS LOC-VC22



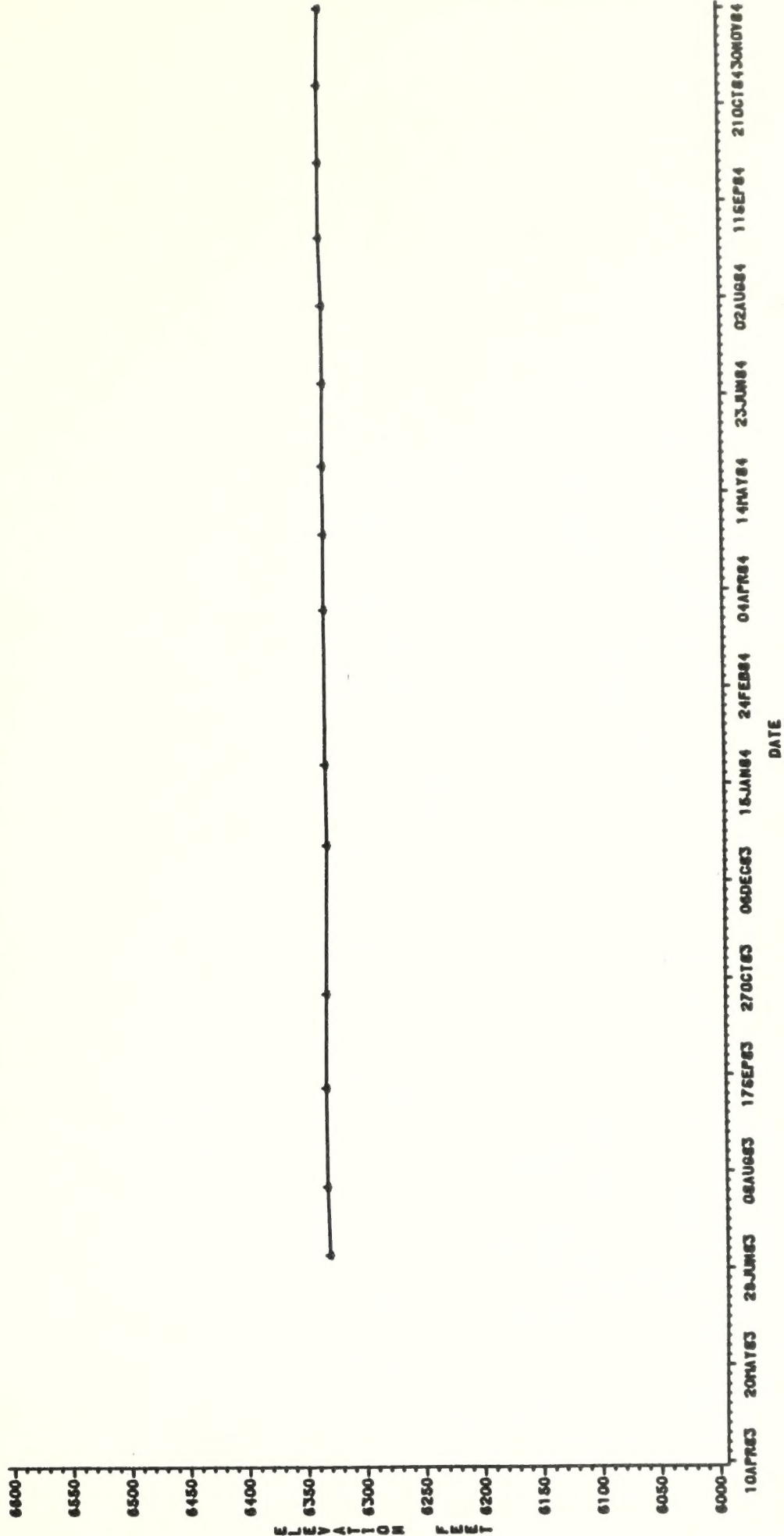
CB WELL LEVELS



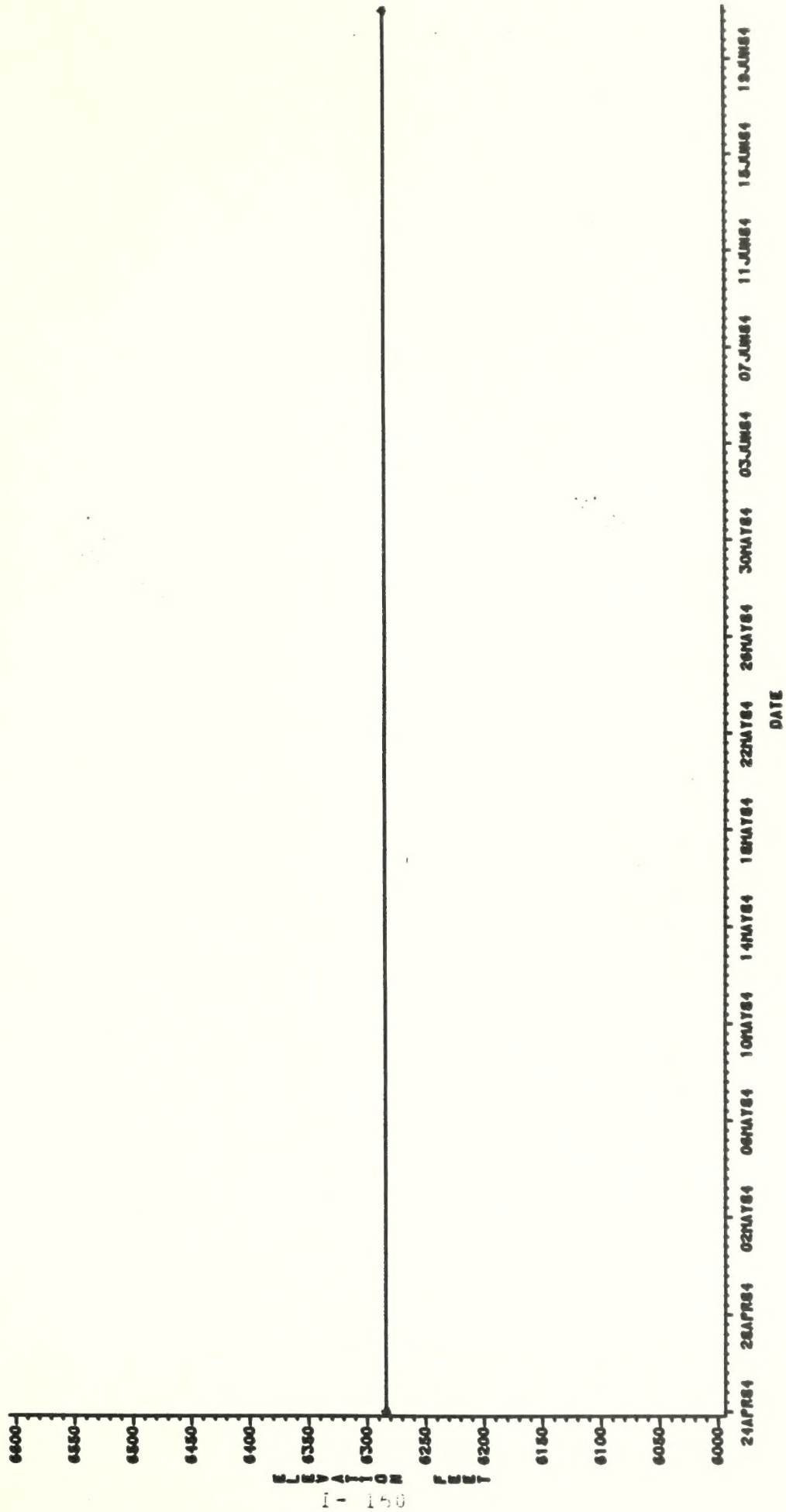
C-B WELL LEVELS LOC-4643



C-B WELL LEVELS LOC-WE43



C-B WELL LEVELS LOG-WC03



C-B WELL LEVELS

B-102-3-2 (WB03)

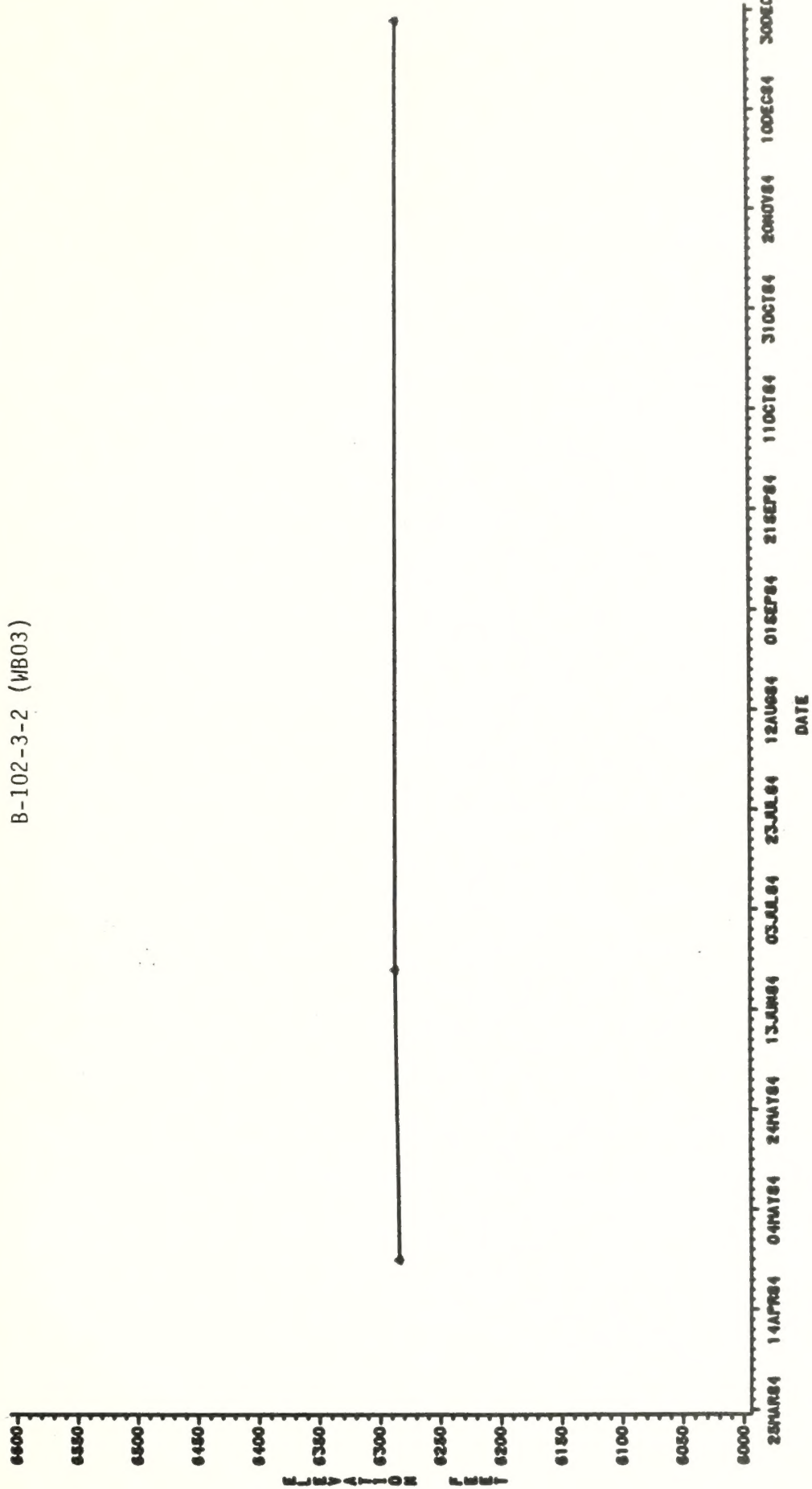
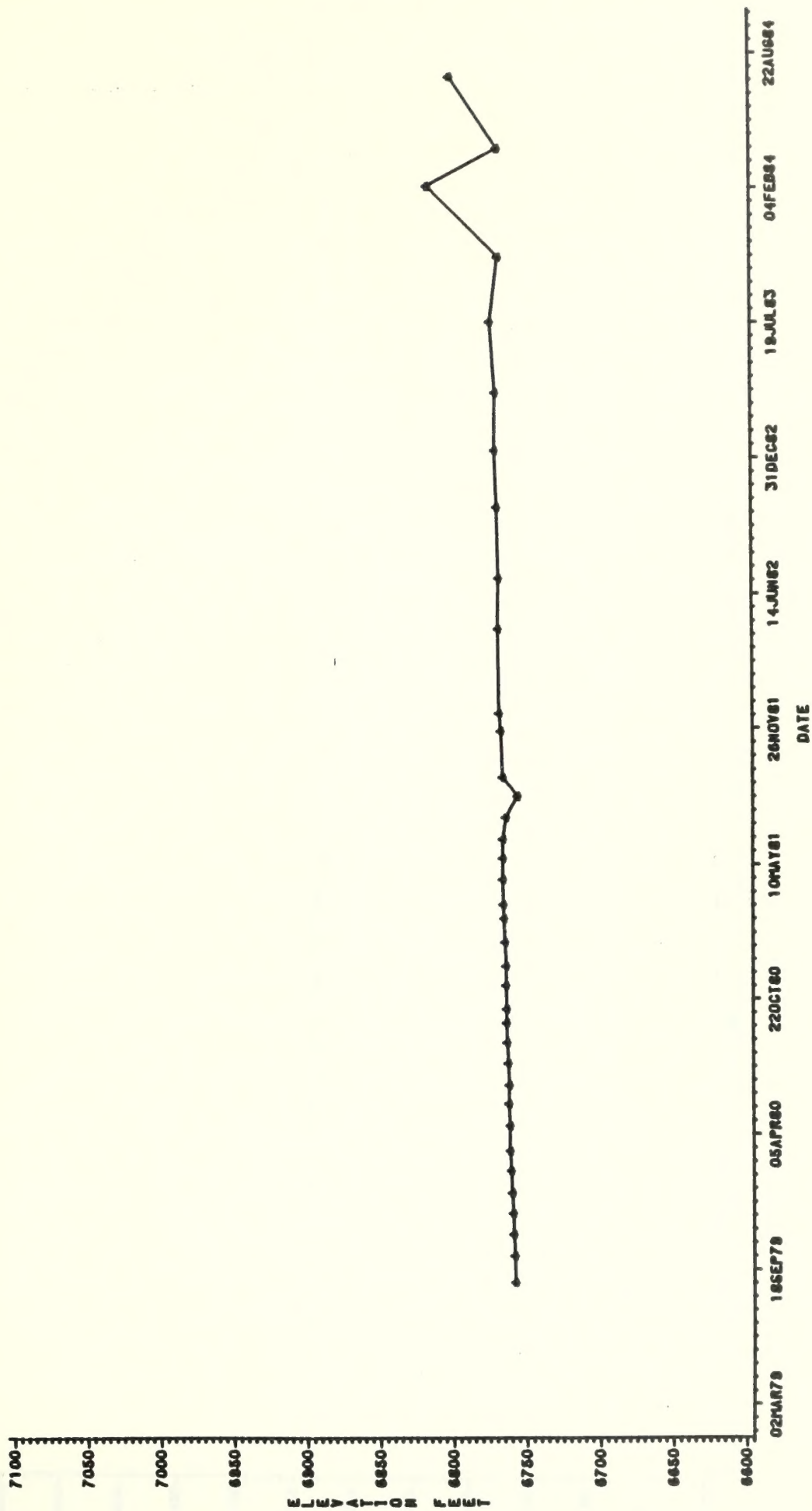


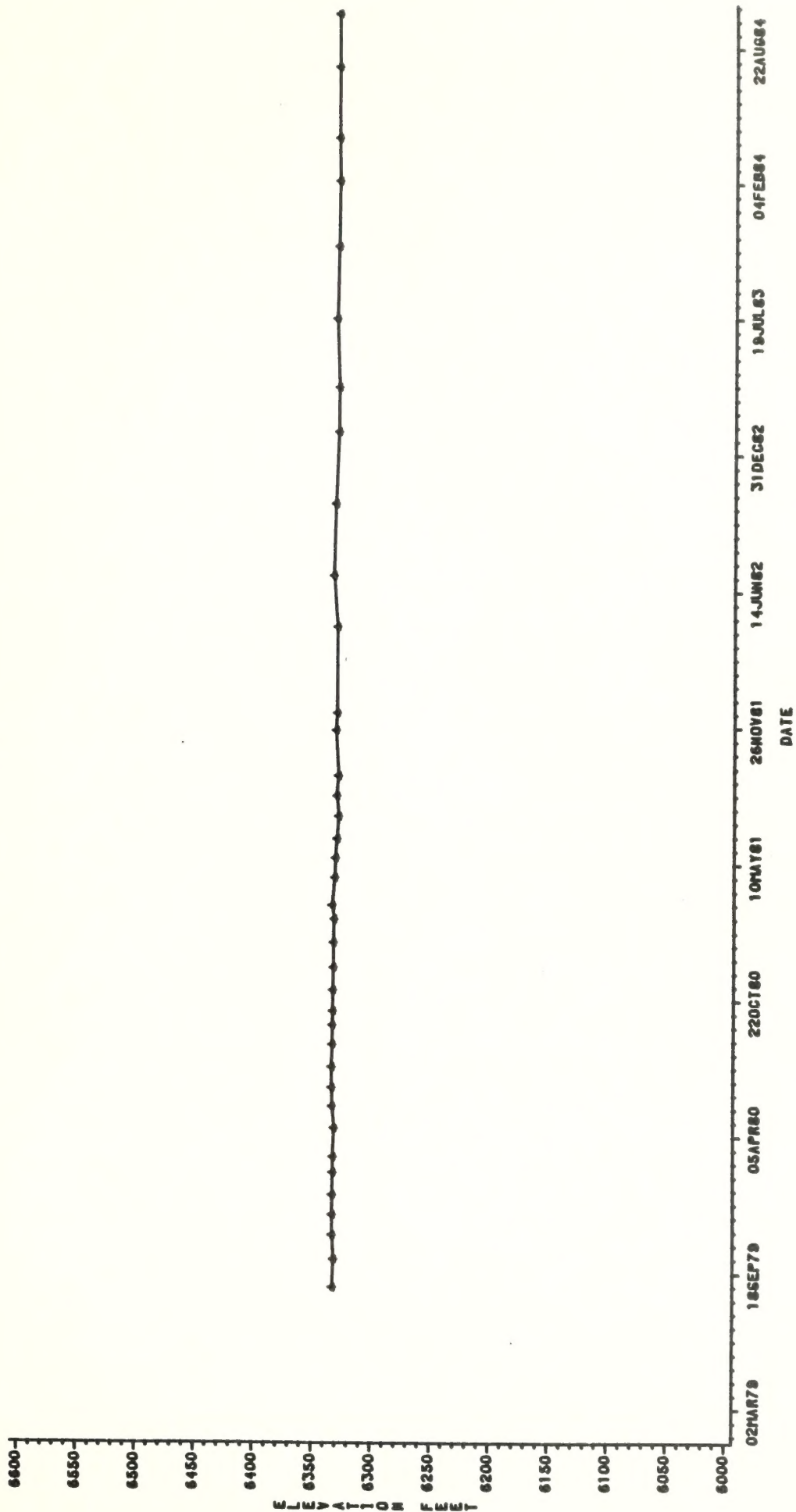
TABLE 1.2.1.4-16

<u>Well No.</u>	<u>Computer Code</u>	<u>Page No.</u>
TH75-5A	WX64	I-163
TH75-13A	WX65	I-164
TH75-18A	WX67	I-165
TH75-9A	WX69	I-166
CER RB-D-02	WX71	I-167
TH75-15A	WX72	I-168
UNION 8-1	WX73	I-169
TH-5	WX75	I-170

WATER LEVEL PLOTS OF UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-VX64



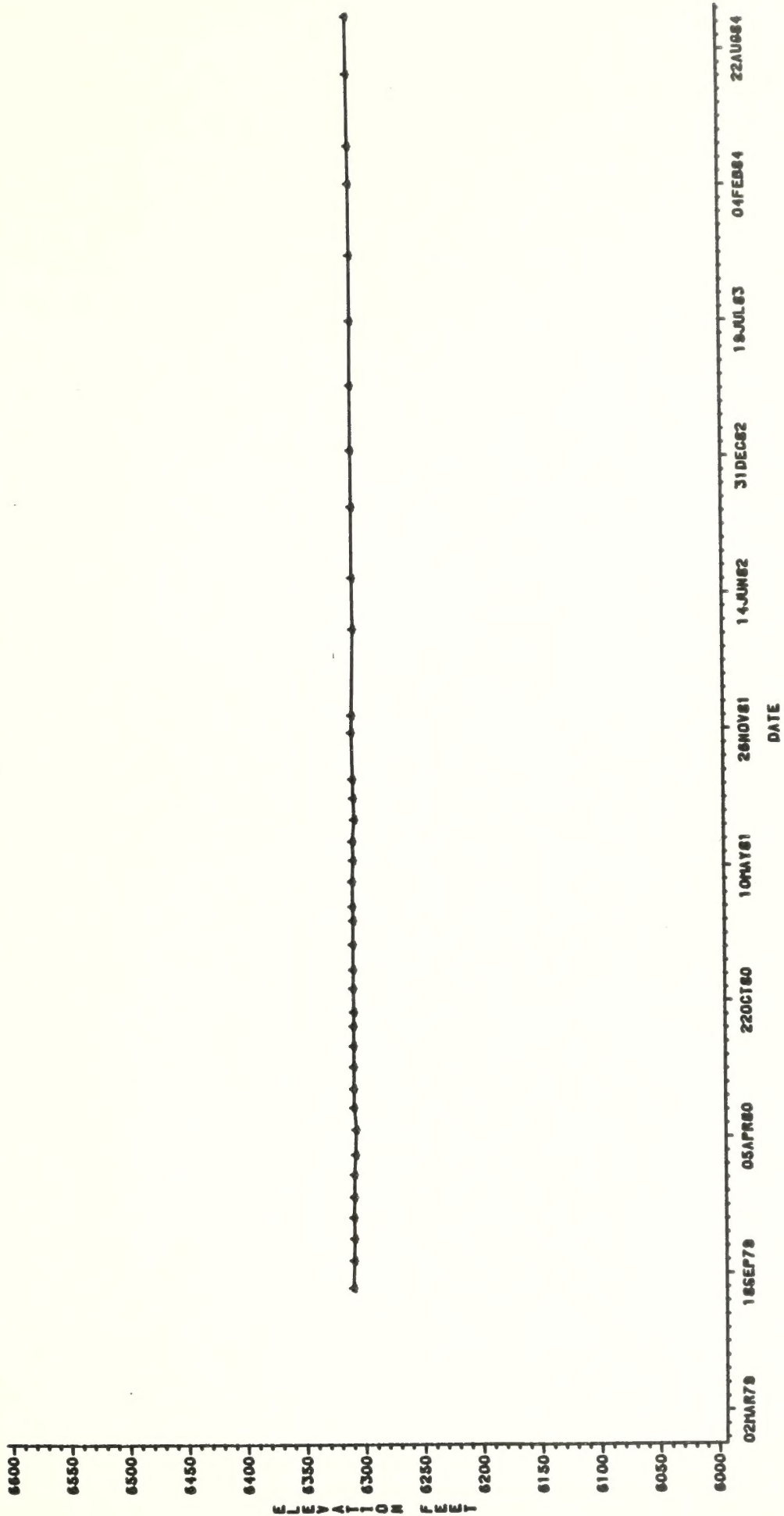
WATER LEVEL PLOTS IN UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-MX65



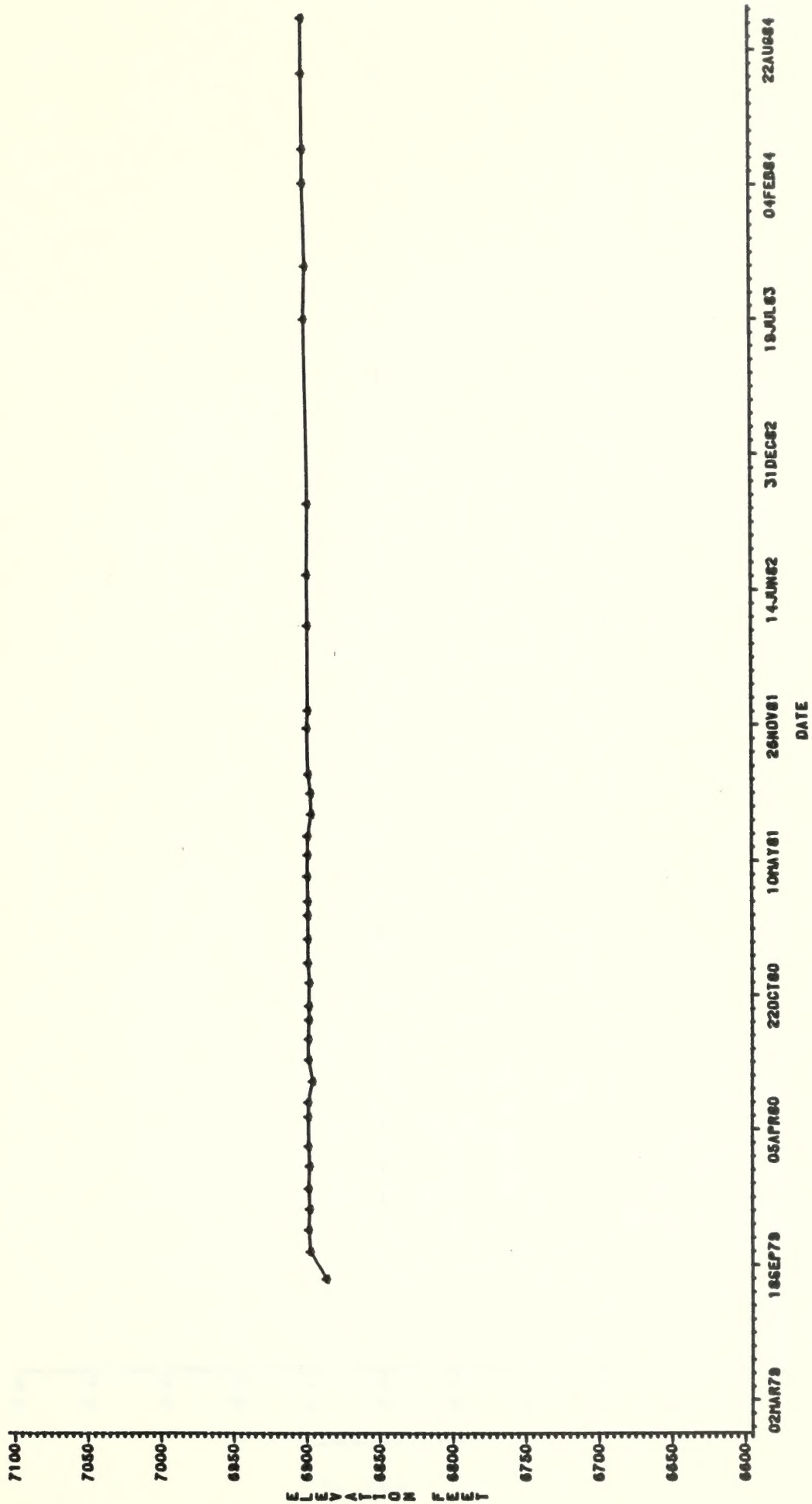


EXPERIMENTAL DATA FOR THE STUDY OF THE EFFECT OF WAVELENGTH ON THE COUNT RATE

WATER LEVEL PLOTS IN UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-MX67



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-W163



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WX71

0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5

FLOWING
WELLS



02MAY79

18SEP79

05APR80

22OCT80

10MAY81

28NOV81

14JUN82

31DEC82

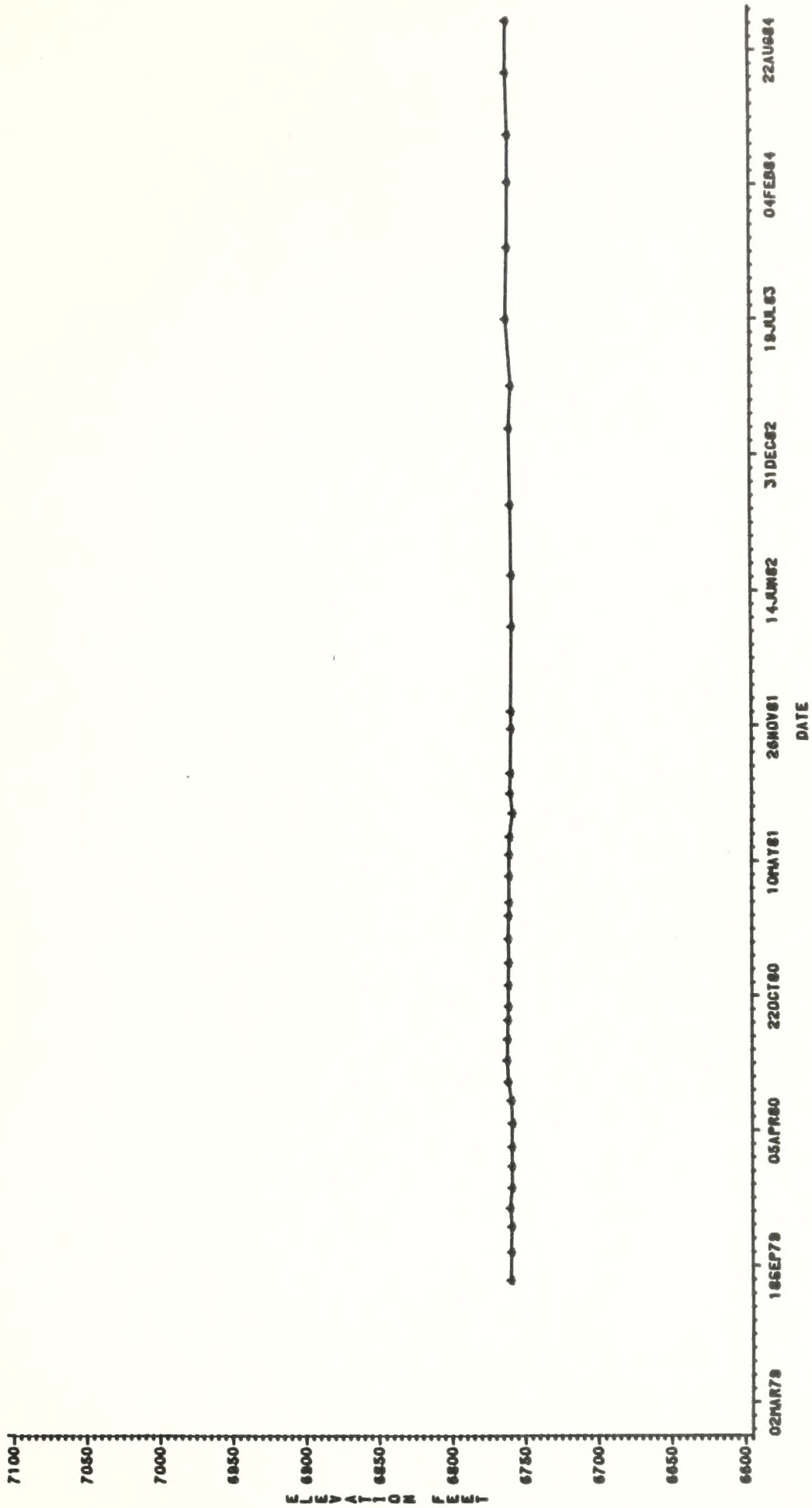
19JUL83

04FEB84

22AUG84

DATE

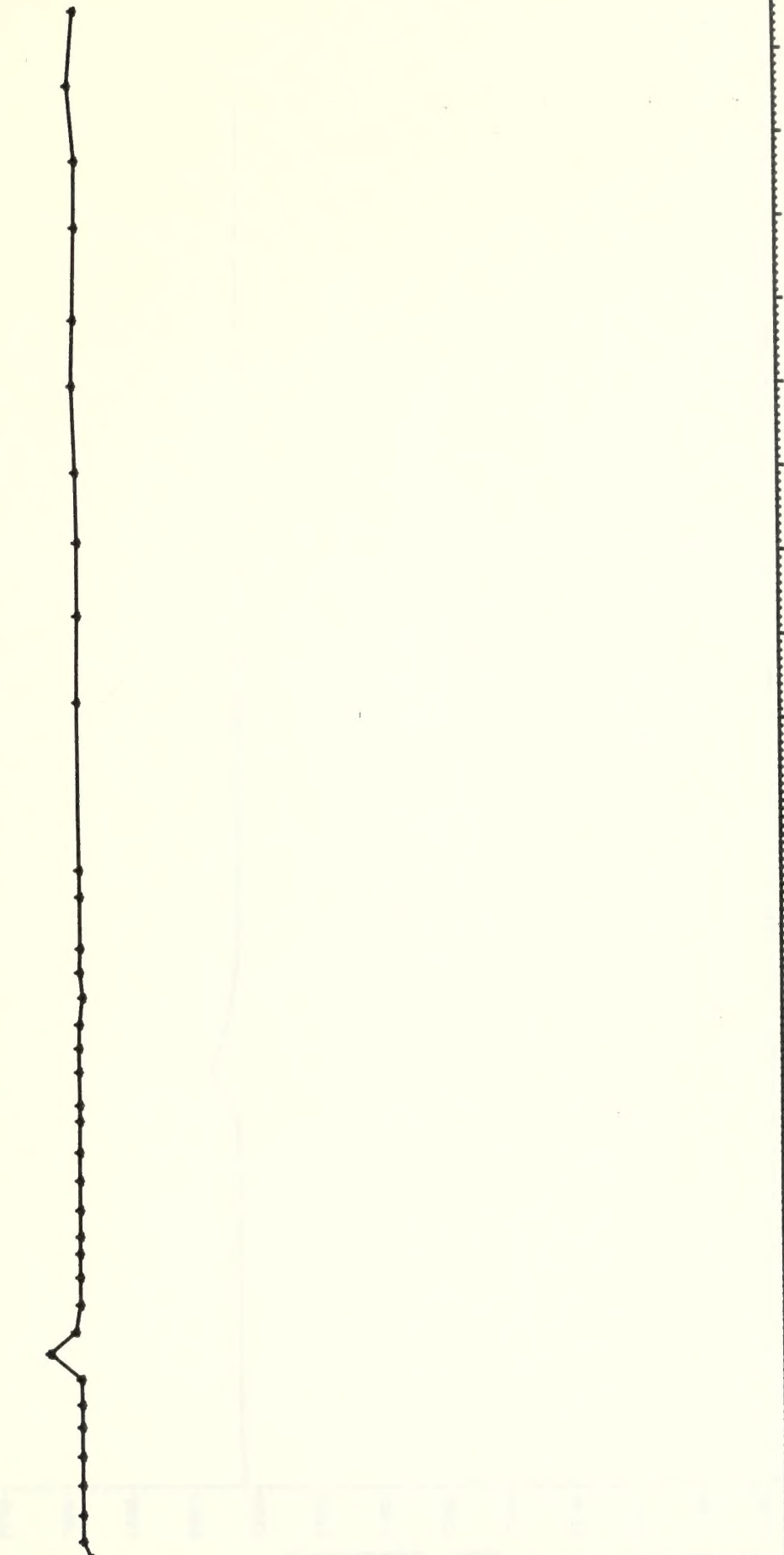
WATER LEVEL PLOTS OF UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-WX72



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-MX73

7700
7650
7600
7550
7500
7450
7400
7350
7300
7250
7200
7150
7100

ELEVATION FEET



DATE

WATER LEVEL PLOTS OF UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-0278

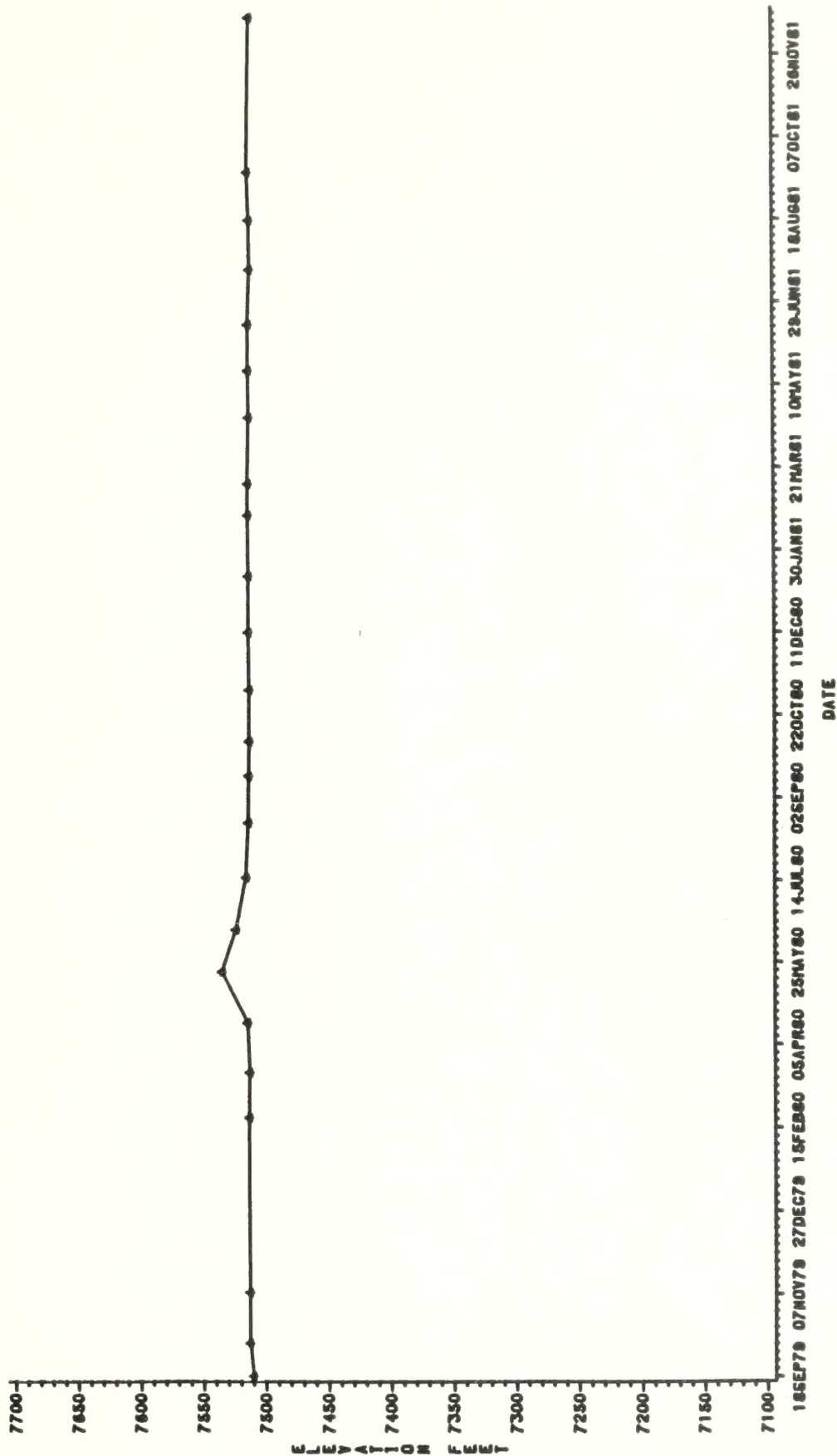


Fig. 1



Intensity
Wavelength (nm)

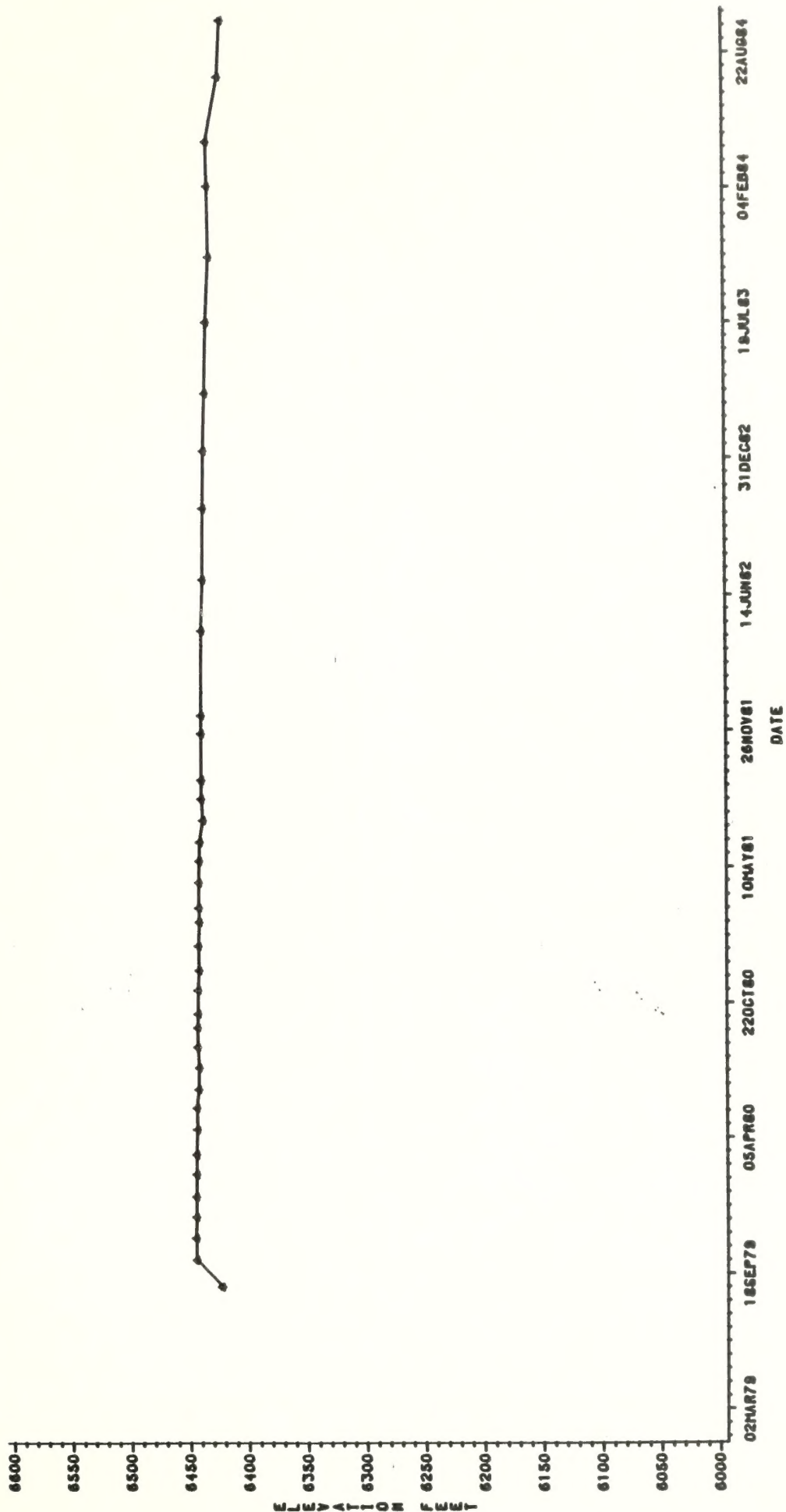
TABLE 1.2.1.4-17

<u>Well No.</u>	<u>Computer Code</u>	<u>Page No.</u>
TH75-5B	WY64	I-172
TH75-13B	WY65	I-173
EQUITY-1	WY66	I-174
TH75-18B	WY67	I-175
TH75-10B	WY68	I-176
TH75-9B	WY69	I-177
EQUITY-SULFUR-1A	WY70	I-178
CER RB-D-03	WY71	I-179
TH75-15B	WY72	I-180
TG71-3	WY75	I-181
TG71-5	WY76	I-182
GETTY 9-40	WY77	I-183
TG71-4	WY78	I-184
EQUITY BS-13	WY79	I-185

TABLE 1.1-2.4-1

Well No.	Compressor 2 No.	Well No.
W-1	W-1	W-1
W-2	W-2	W-2
W-3	W-3	W-3
W-4	W-4	W-4
W-5	W-5	W-5
W-6	W-6	W-6
W-7	W-7	W-7
W-8	W-8	W-8
W-9	W-9	W-9
W-10	W-10	W-10
W-11	W-11	W-11
W-12	W-12	W-12
W-13	W-13	W-13
W-14	W-14	W-14
W-15	W-15	W-15
W-16	W-16	W-16
W-17	W-17	W-17
W-18	W-18	W-18
W-19	W-19	W-19
W-20	W-20	W-20
W-21	W-21	W-21
W-22	W-22	W-22
W-23	W-23	W-23
W-24	W-24	W-24
W-25	W-25	W-25
W-26	W-26	W-26
W-27	W-27	W-27
W-28	W-28	W-28
W-29	W-29	W-29
W-30	W-30	W-30
W-31	W-31	W-31
W-32	W-32	W-32
W-33	W-33	W-33
W-34	W-34	W-34
W-35	W-35	W-35
W-36	W-36	W-36
W-37	W-37	W-37
W-38	W-38	W-38
W-39	W-39	W-39
W-40	W-40	W-40
W-41	W-41	W-41
W-42	W-42	W-42
W-43	W-43	W-43
W-44	W-44	W-44
W-45	W-45	W-45
W-46	W-46	W-46
W-47	W-47	W-47
W-48	W-48	W-48
W-49	W-49	W-49
W-50	W-50	W-50
W-51	W-51	W-51
W-52	W-52	W-52
W-53	W-53	W-53
W-54	W-54	W-54
W-55	W-55	W-55
W-56	W-56	W-56
W-57	W-57	W-57
W-58	W-58	W-58
W-59	W-59	W-59
W-60	W-60	W-60
W-61	W-61	W-61
W-62	W-62	W-62
W-63	W-63	W-63
W-64	W-64	W-64
W-65	W-65	W-65
W-66	W-66	W-66
W-67	W-67	W-67
W-68	W-68	W-68
W-69	W-69	W-69
W-70	W-70	W-70
W-71	W-71	W-71
W-72	W-72	W-72
W-73	W-73	W-73
W-74	W-74	W-74
W-75	W-75	W-75
W-76	W-76	W-76
W-77	W-77	W-77
W-78	W-78	W-78
W-79	W-79	W-79
W-80	W-80	W-80
W-81	W-81	W-81
W-82	W-82	W-82
W-83	W-83	W-83
W-84	W-84	W-84
W-85	W-85	W-85
W-86	W-86	W-86
W-87	W-87	W-87
W-88	W-88	W-88
W-89	W-89	W-89
W-90	W-90	W-90
W-91	W-91	W-91
W-92	W-92	W-92
W-93	W-93	W-93
W-94	W-94	W-94
W-95	W-95	W-95
W-96	W-96	W-96
W-97	W-97	W-97
W-98	W-98	W-98
W-99	W-99	W-99
W-100	W-100	W-100

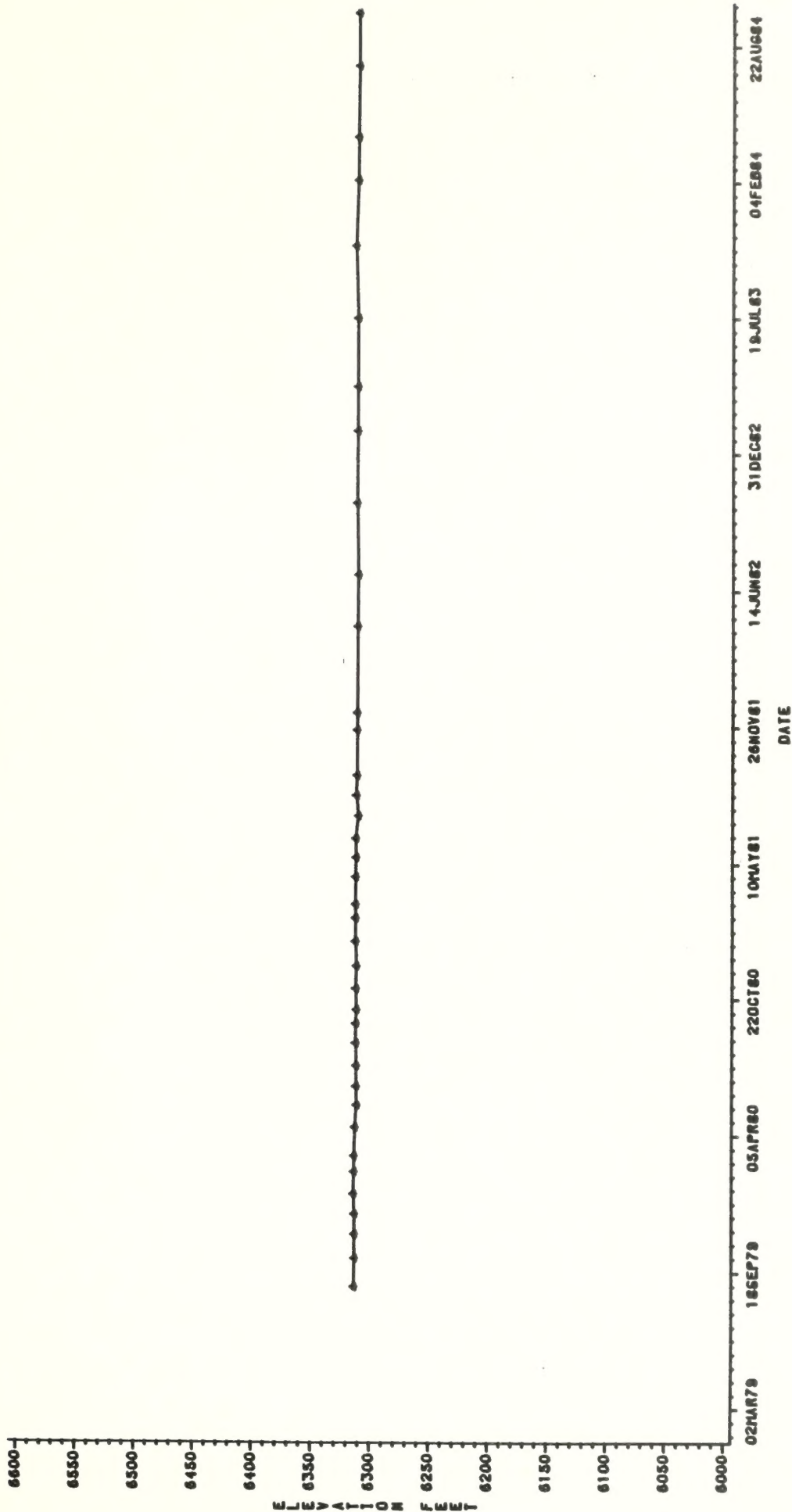
WATER LEVEL PLOTS IN LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-VT64





PREPARED BY THE
 OFFICE OF THE SECRETARY OF THE ARMY
 WASHINGTON, D. C. 20315

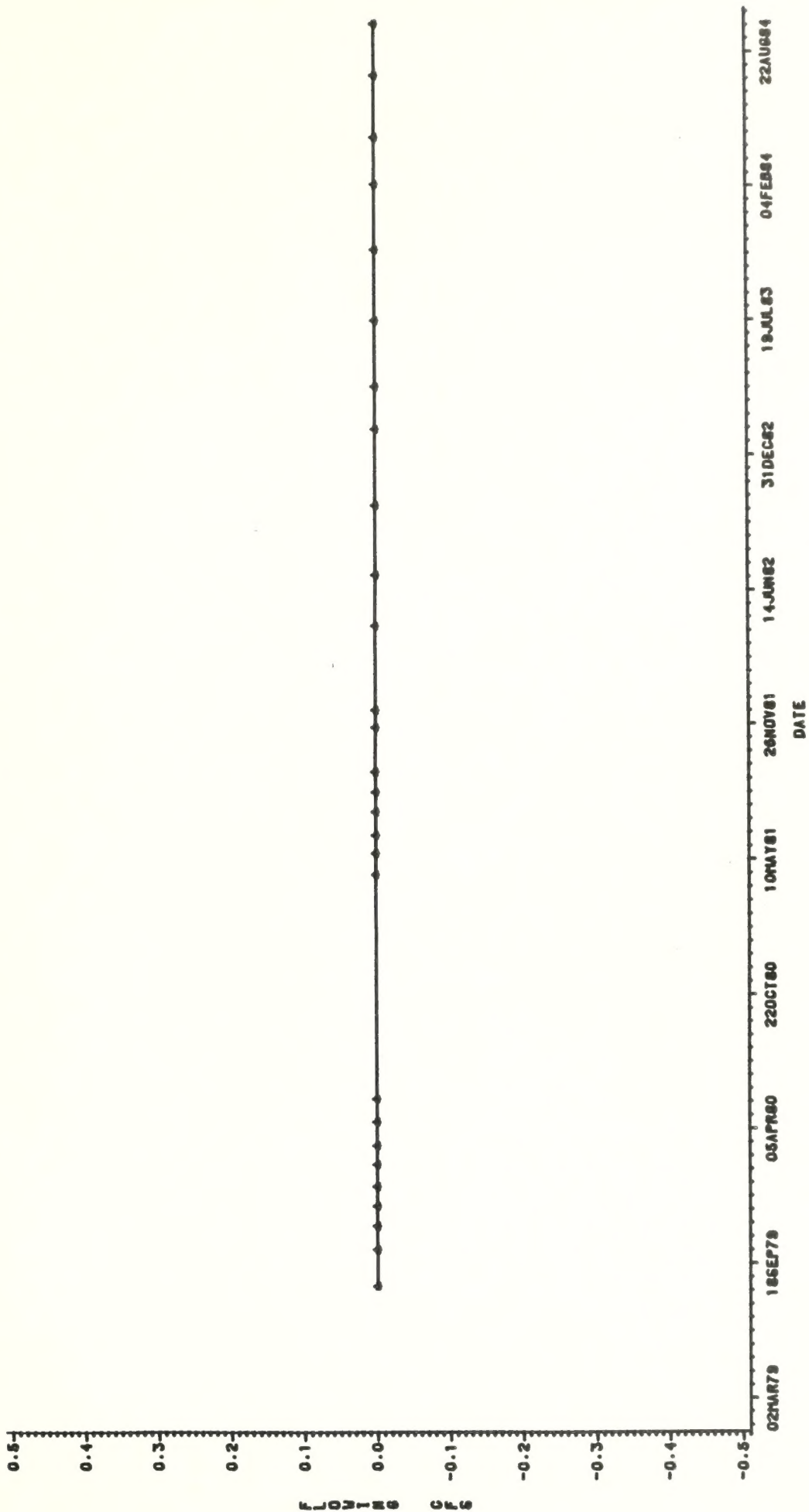
WATER LEVEL PLOTS IN LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WY85



STATE UNIVERSITY OF NEW YORK
AT BINGHAMTON
BINGHAMTON, NEW YORK



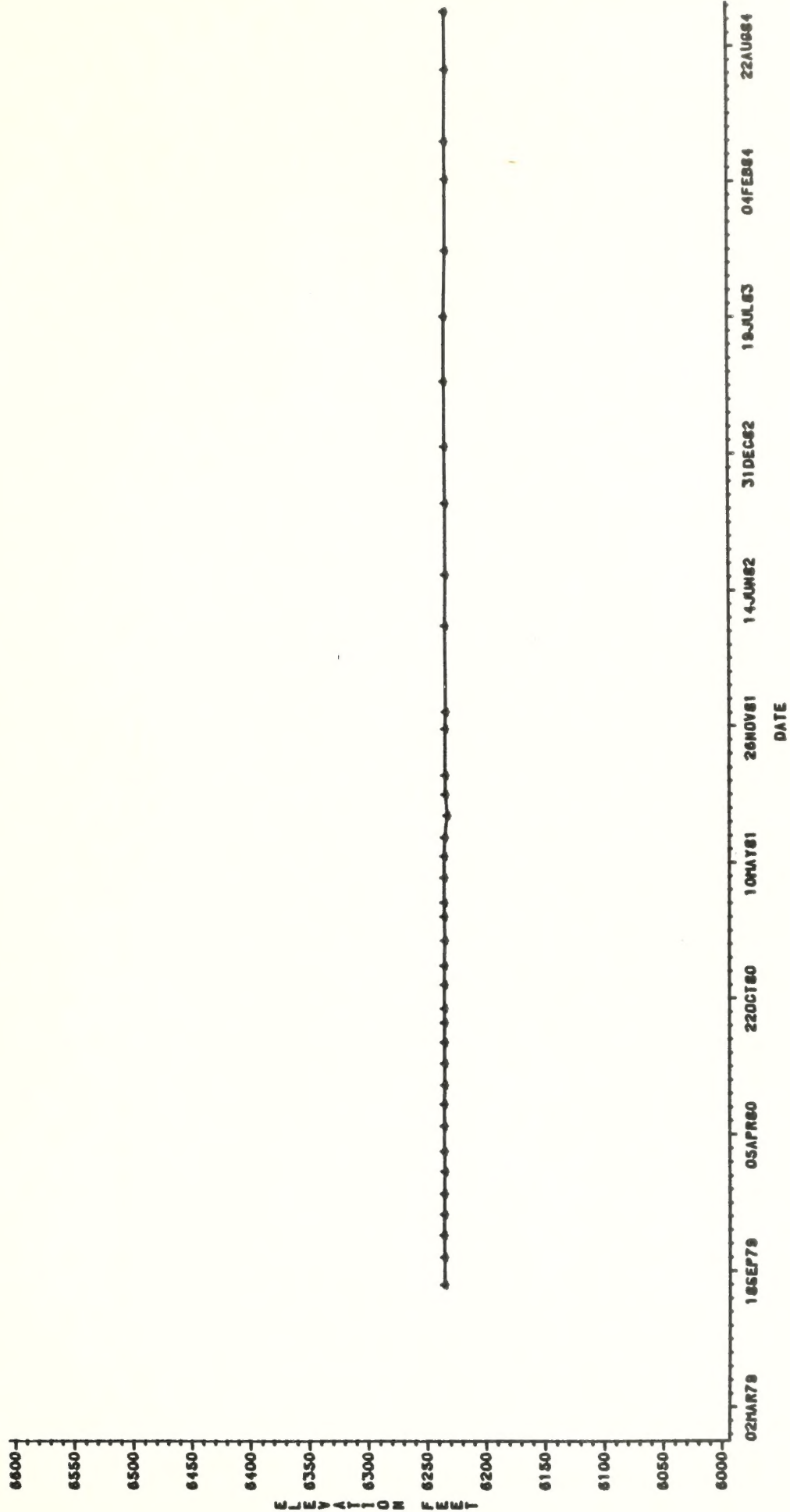
WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-NY64





STUDY OF THE SPECTRA OF THE
SOLUBLE POLYMER OF VINYL
CHLORIDE

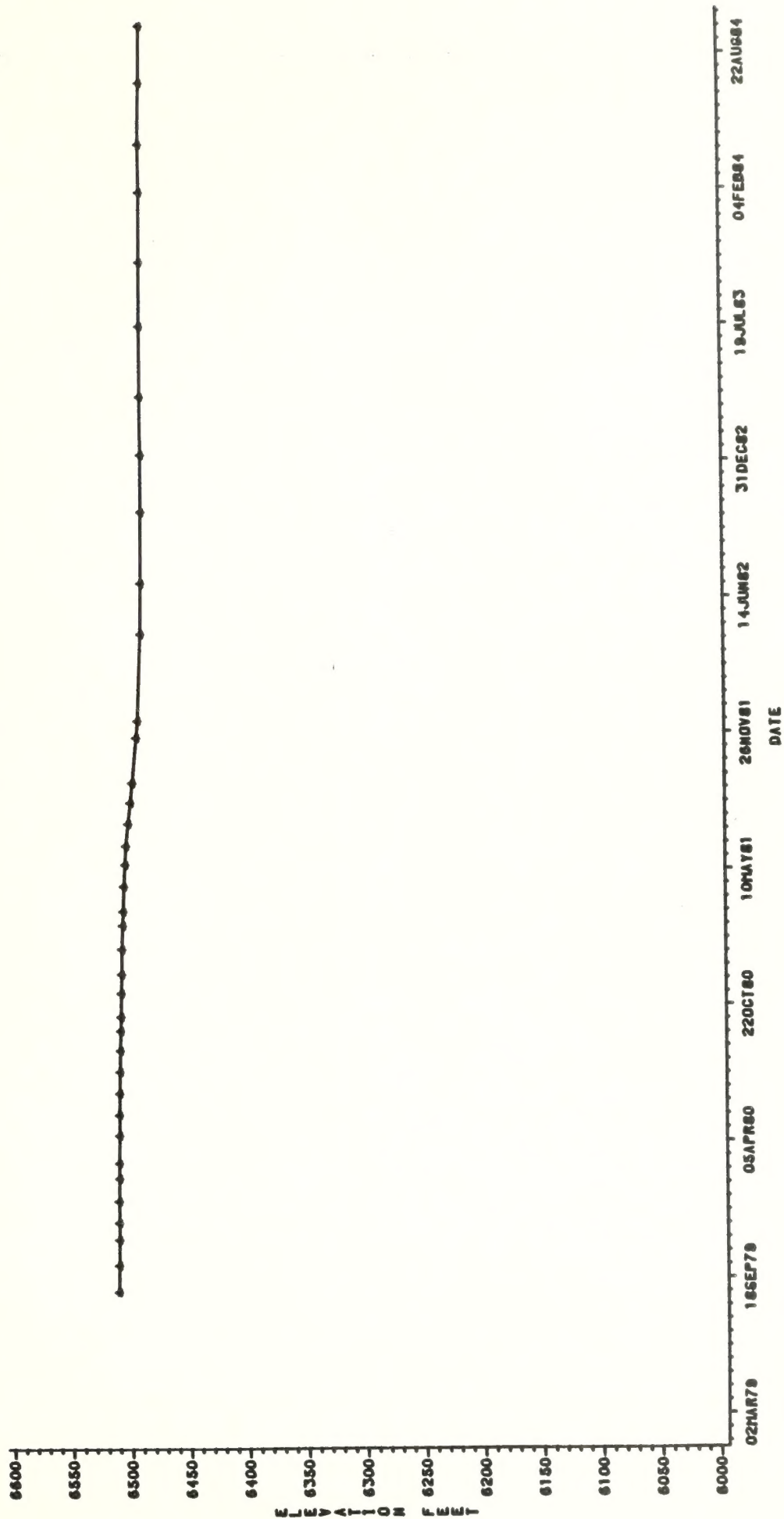
WATER LEVEL PLOTS IN LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-MY67





ELIOT AS WOOD KENDALL IN EIGHT LEVEL HETIAN
AND WOOD KENDALL IN EIGHT LEVEL HETIAN

WATER LEVEL PLOTS IN LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WY68





ALLEN SERVICE SYSTEMS IN STORE LEVEL SERVICE
MANAGEMENT SYSTEMS LTD.

WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-MY68

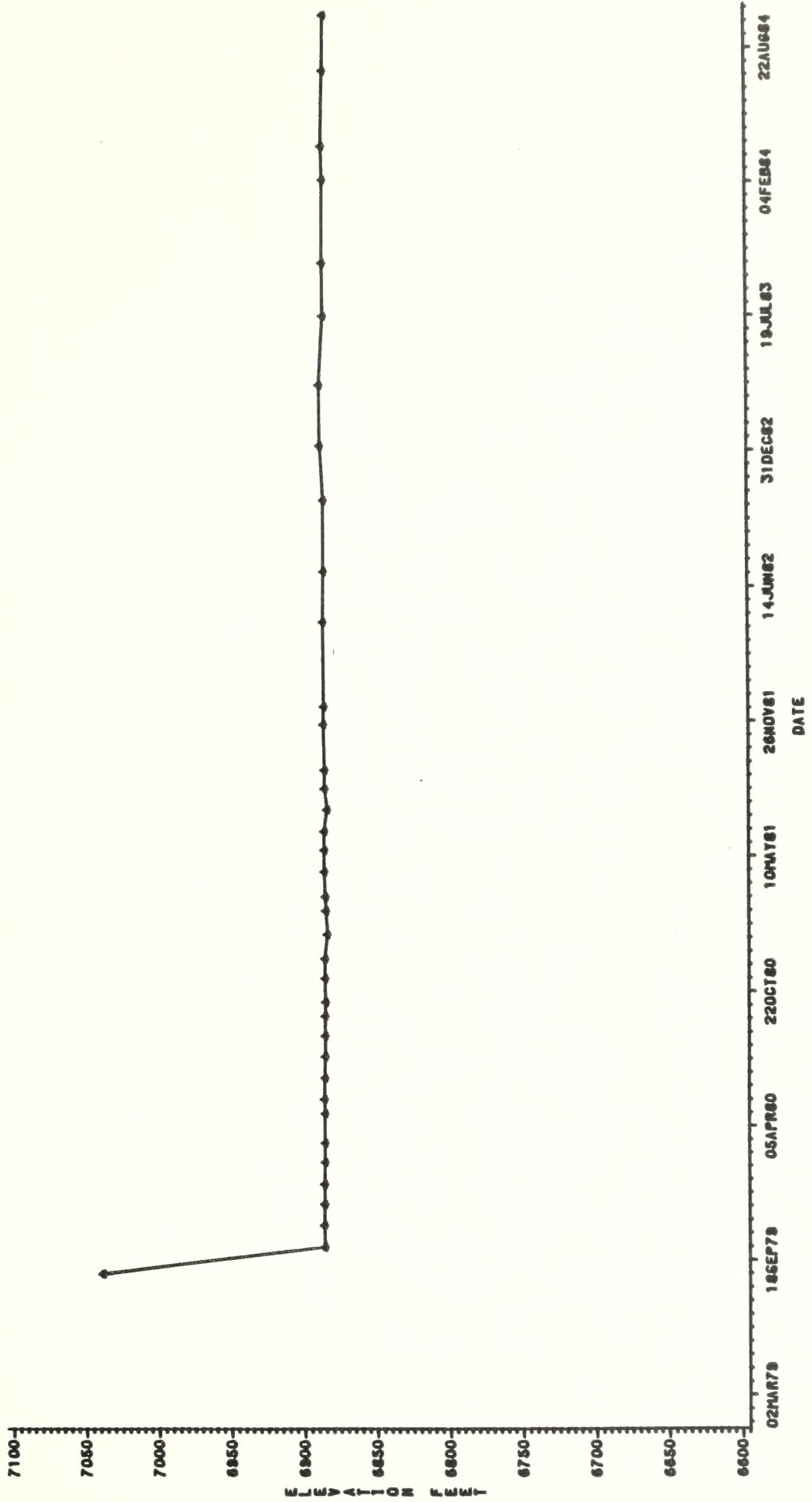
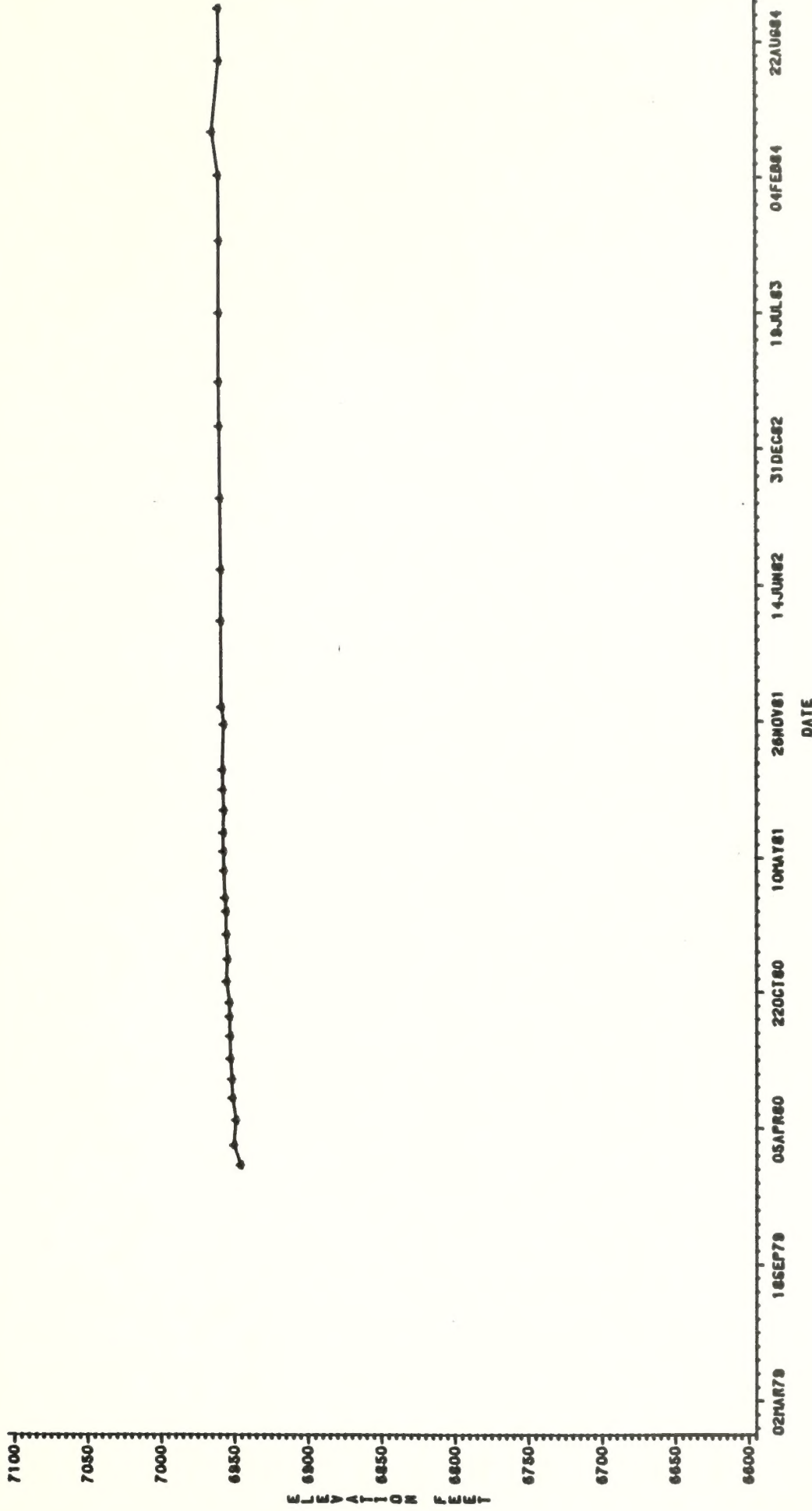




FIGURE 1: A graph showing the relationship between Time and Value. The x-axis represents Time (0 to 100) and the y-axis represents Value (0 to 100). The curve shows a sharp increase in Value starting around Time 90, reaching a maximum of 100 at Time 100.

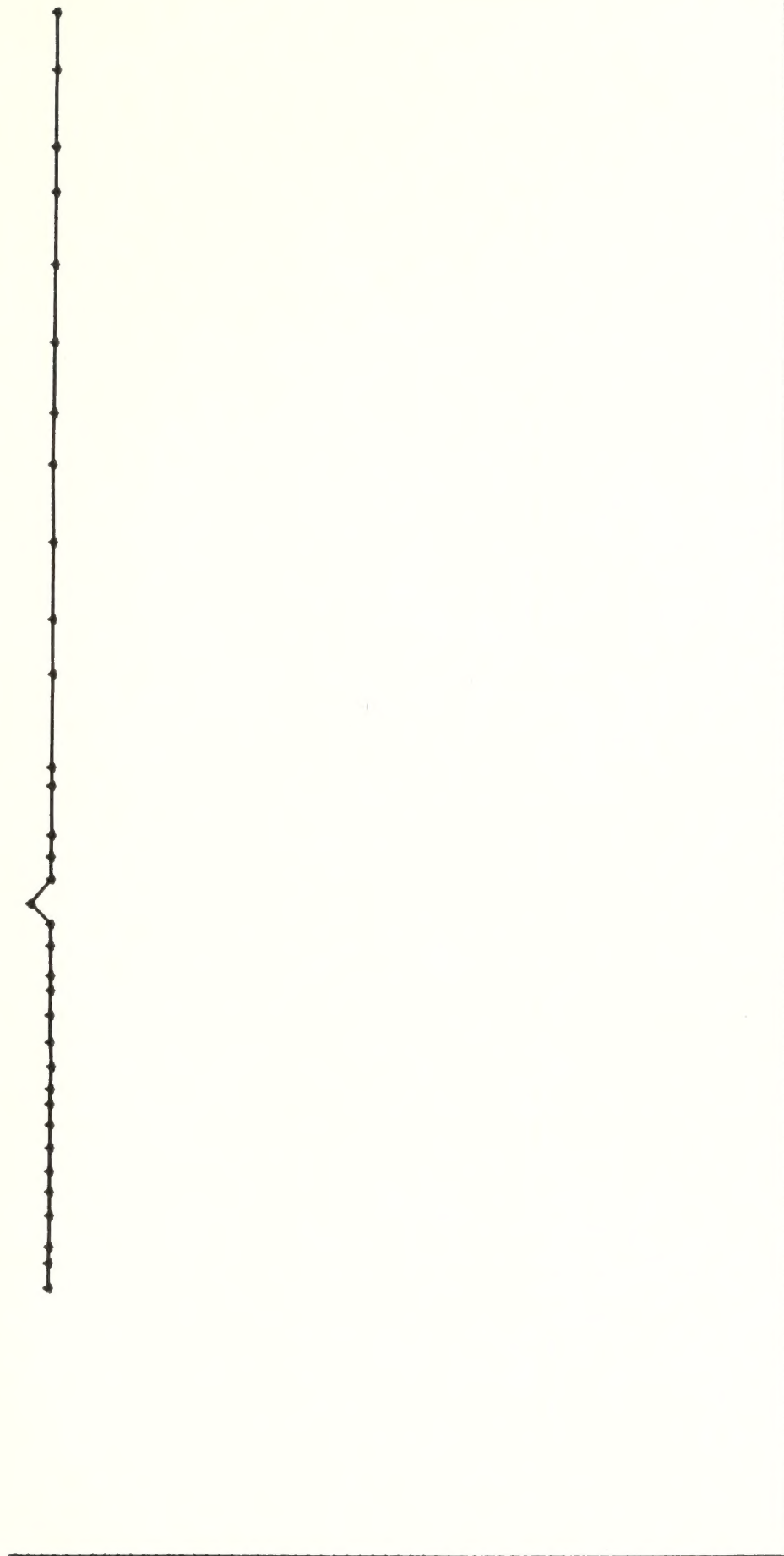
WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-WY70



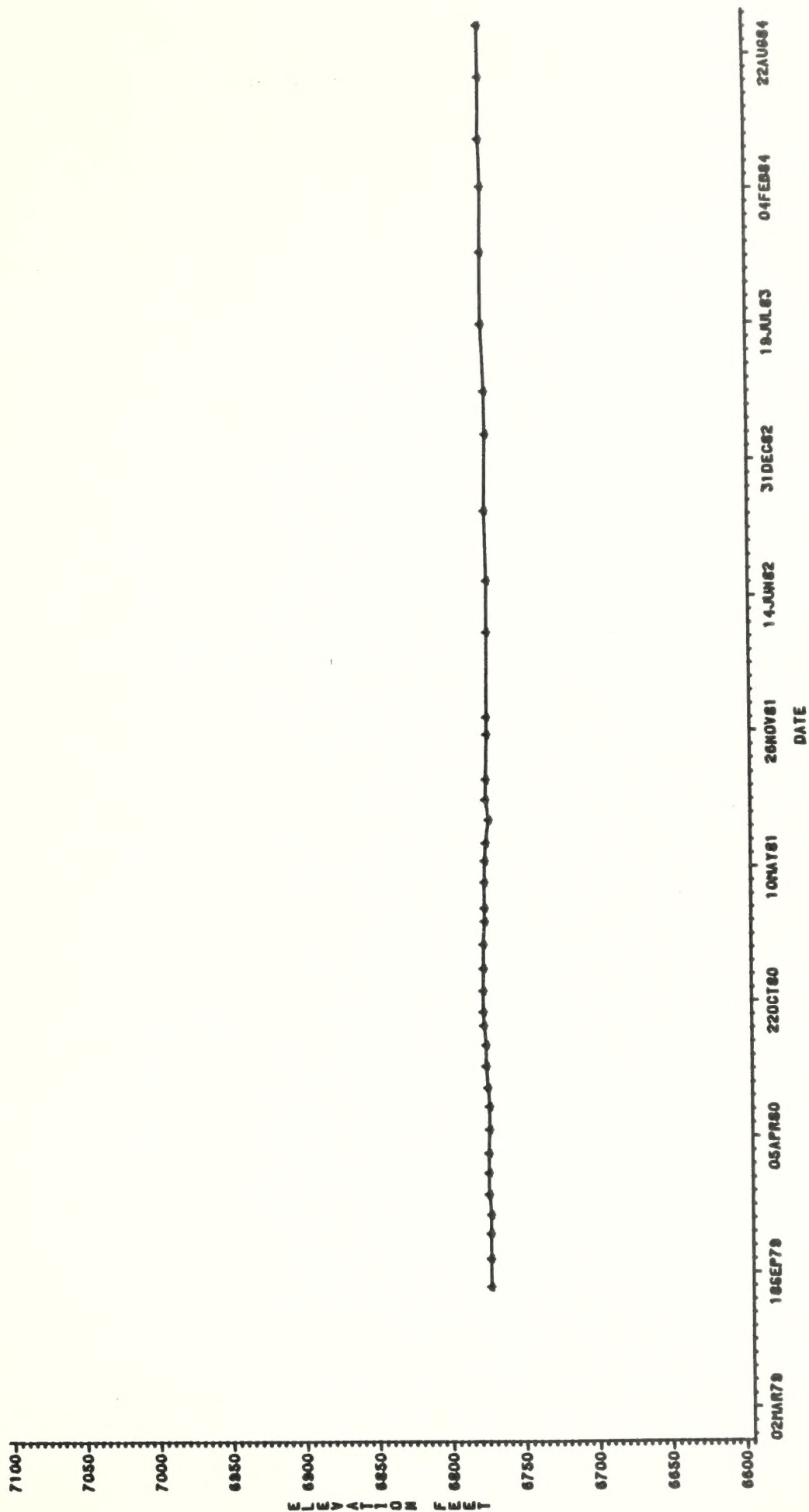
WATER LEVEL PLOTS IN LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-W771

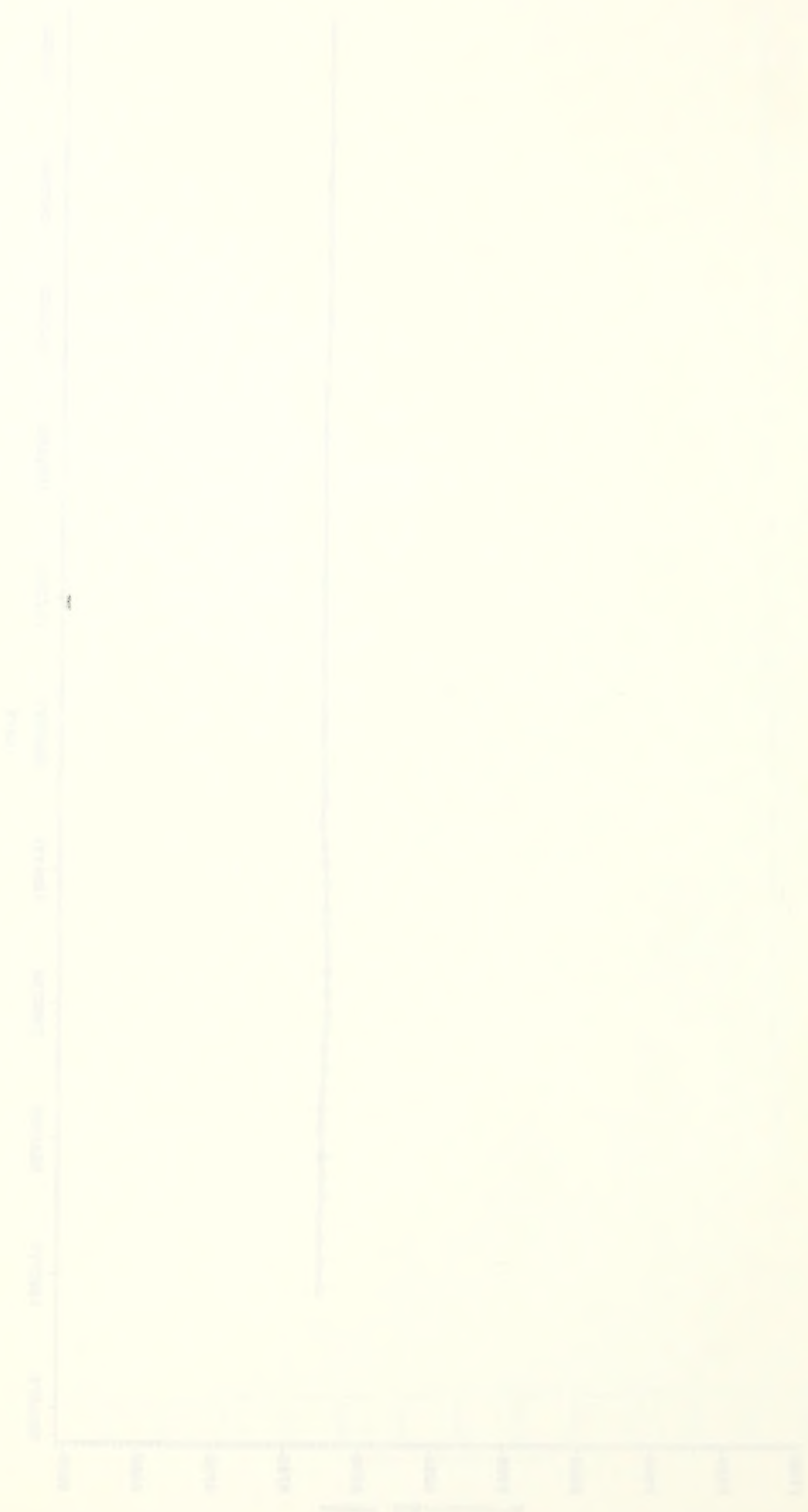
6600
6550
6500
6450
6400
6350
6300
6250
6200
6150
6100
6050
6000

ELEVATION
FEET



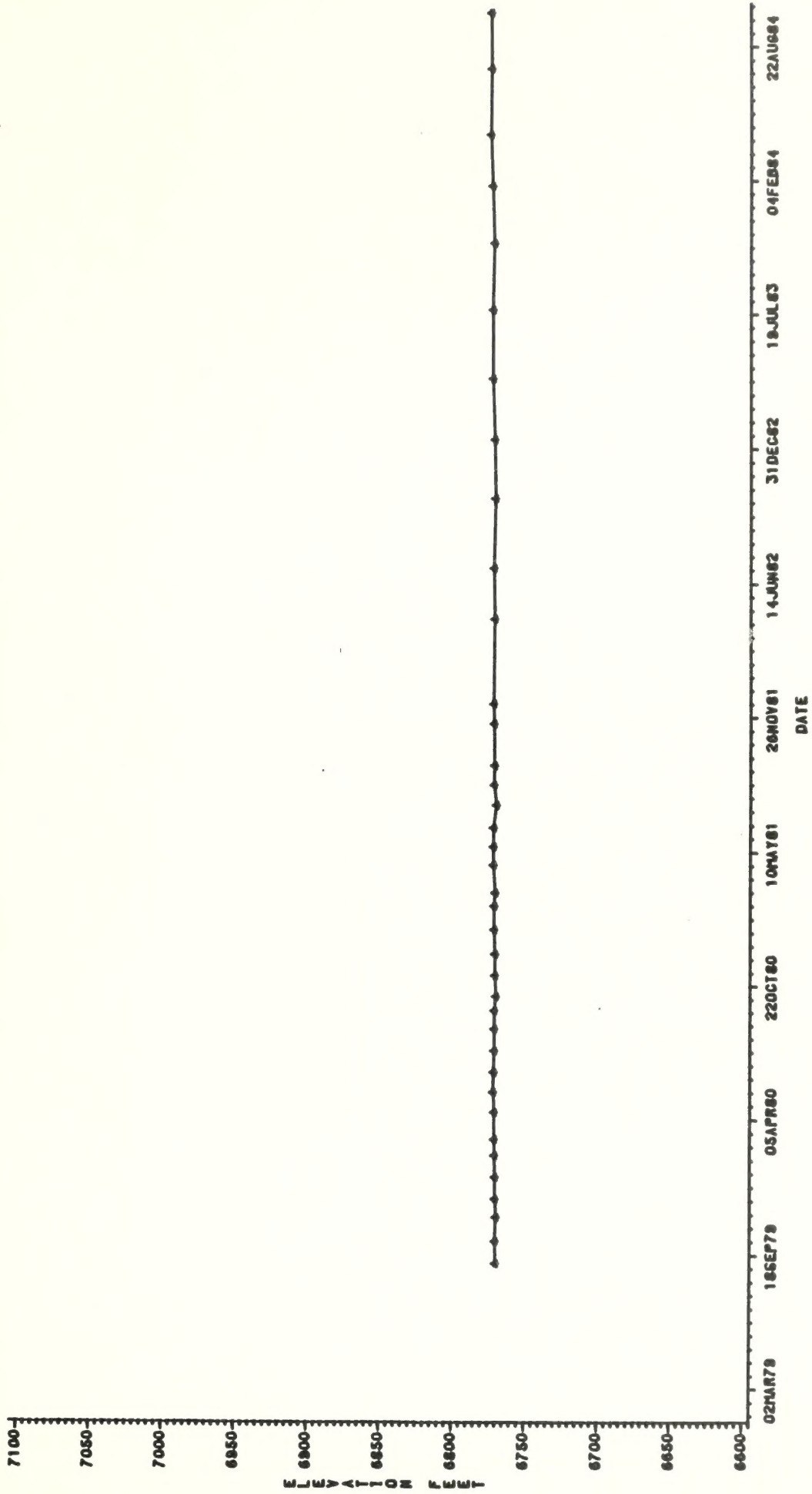
WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-WT72



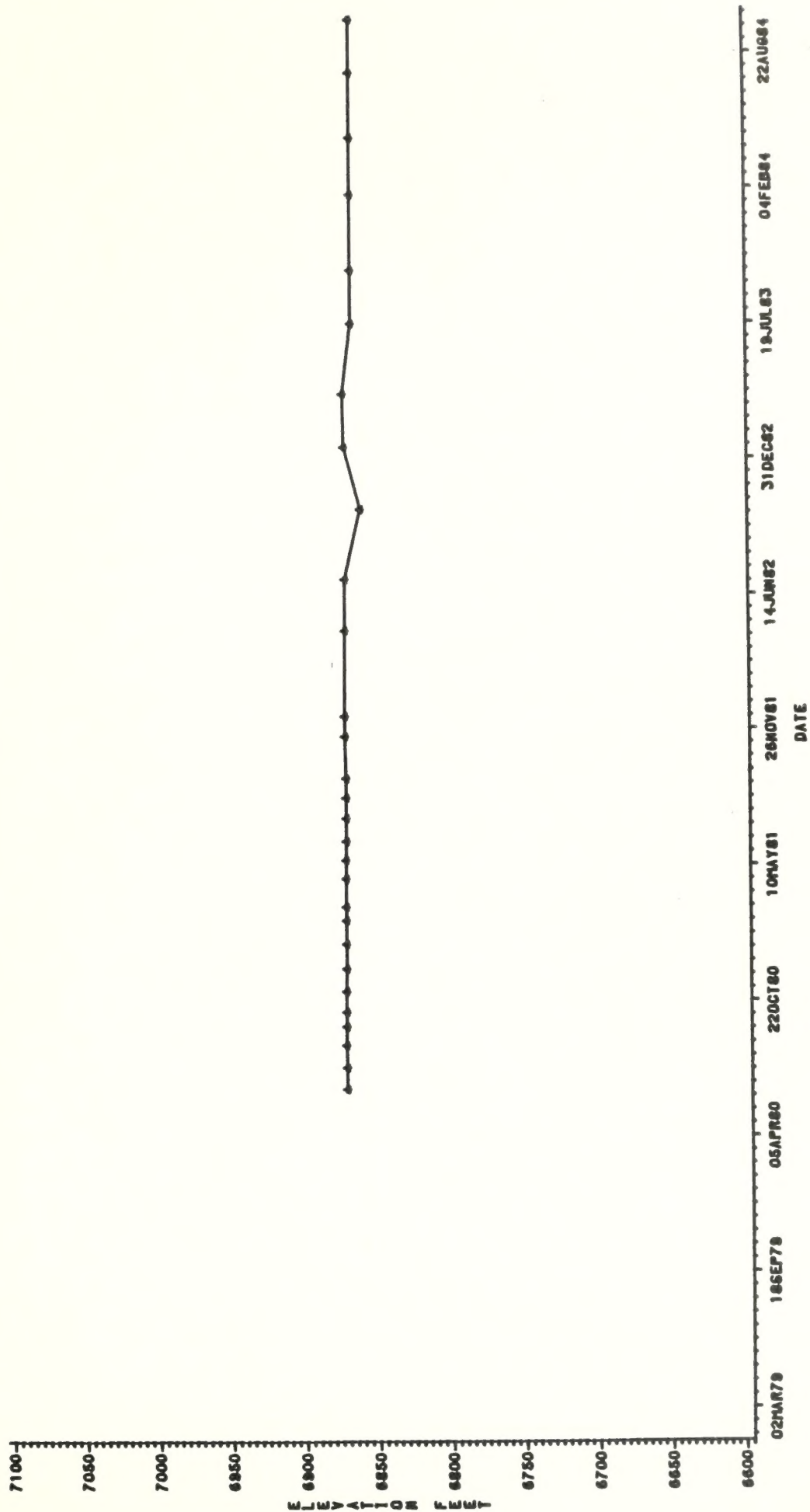


ALLEN HALL LINE OF POWER VOLUME UNIT

WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WY78



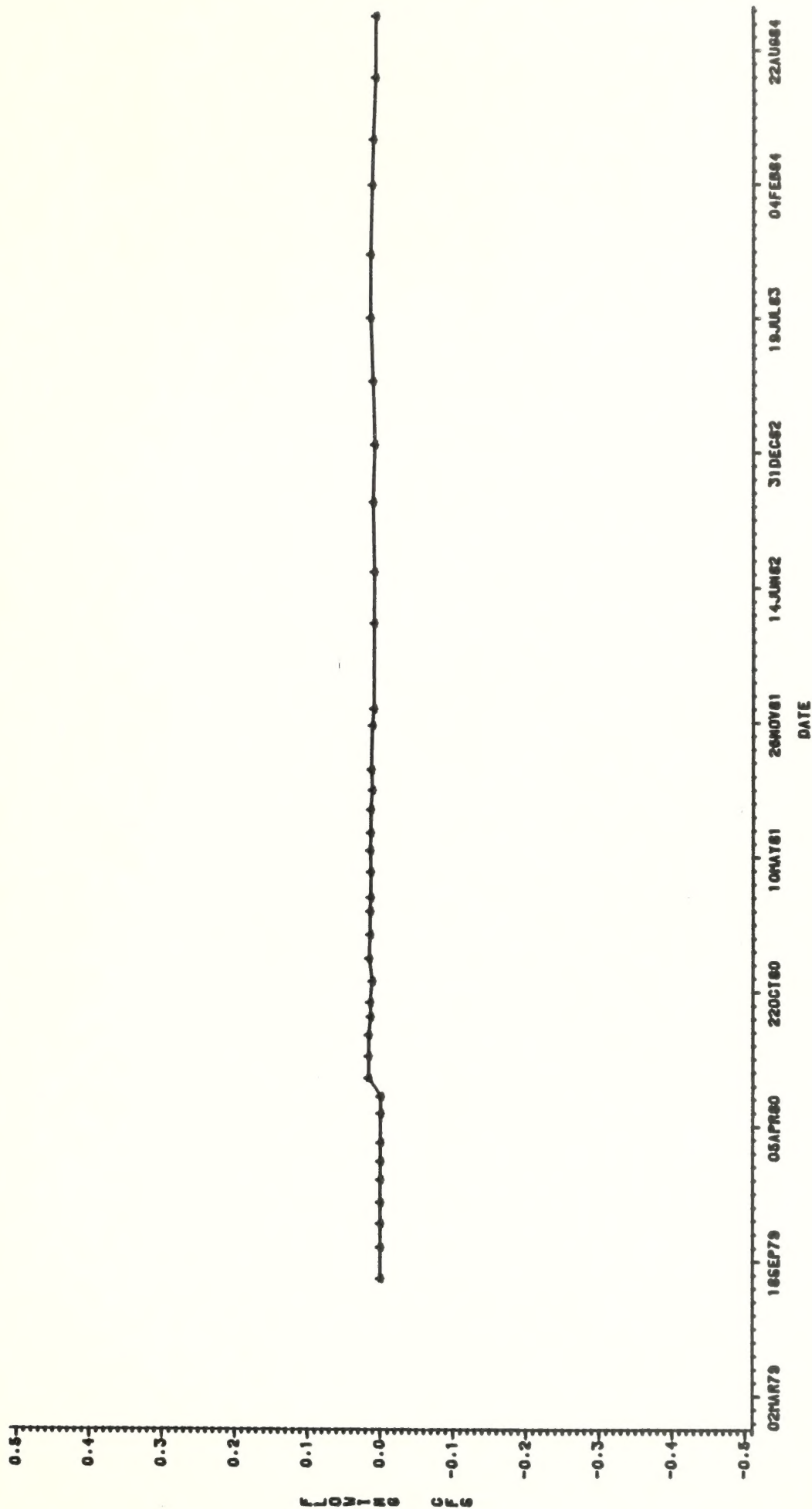
WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-W76

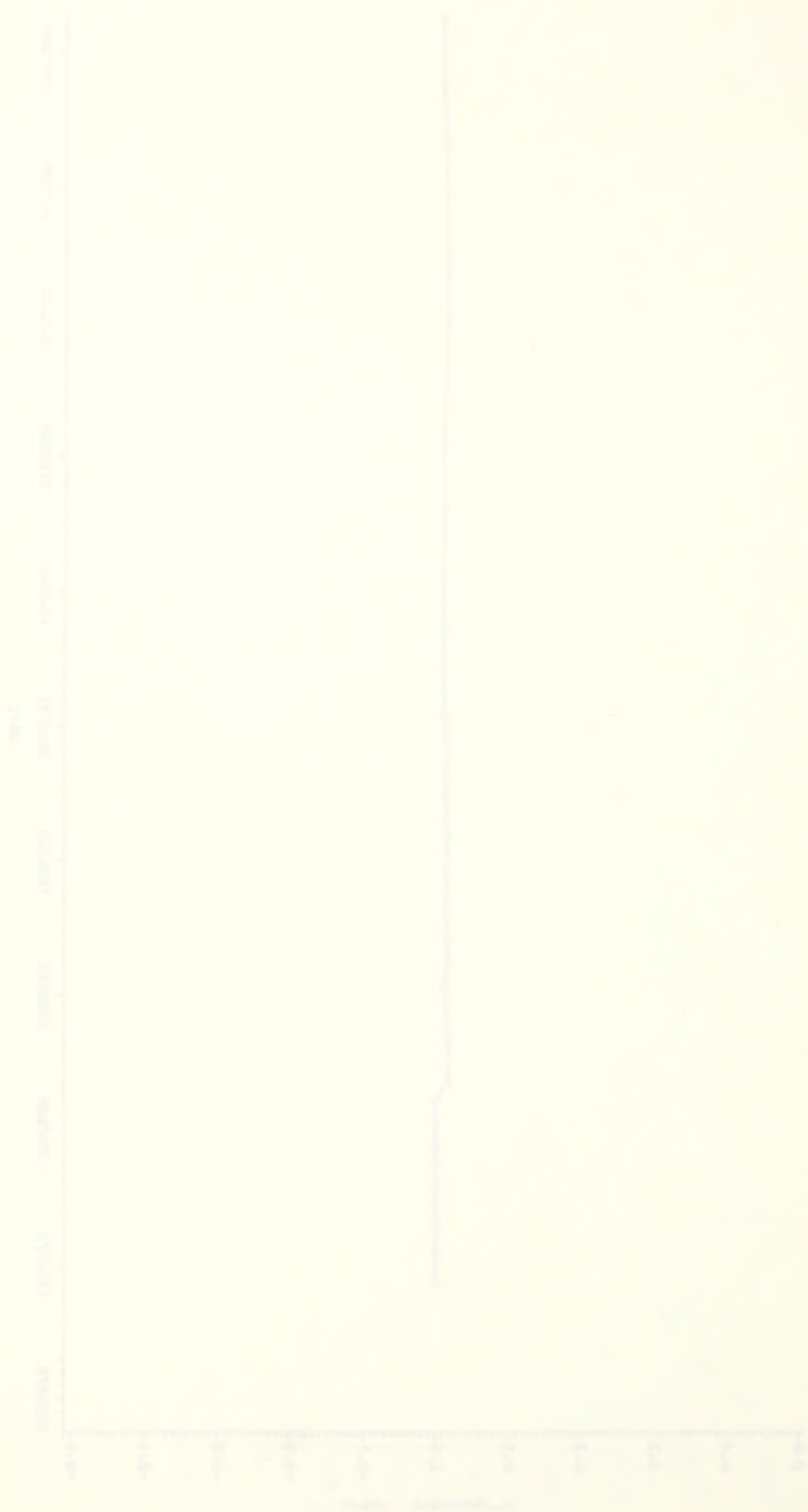




THESE RESULTS ARE IN GOOD AGREEMENT WITH THE
THEORY OF THE POLYMERIZATION OF VINYL MONOMERS

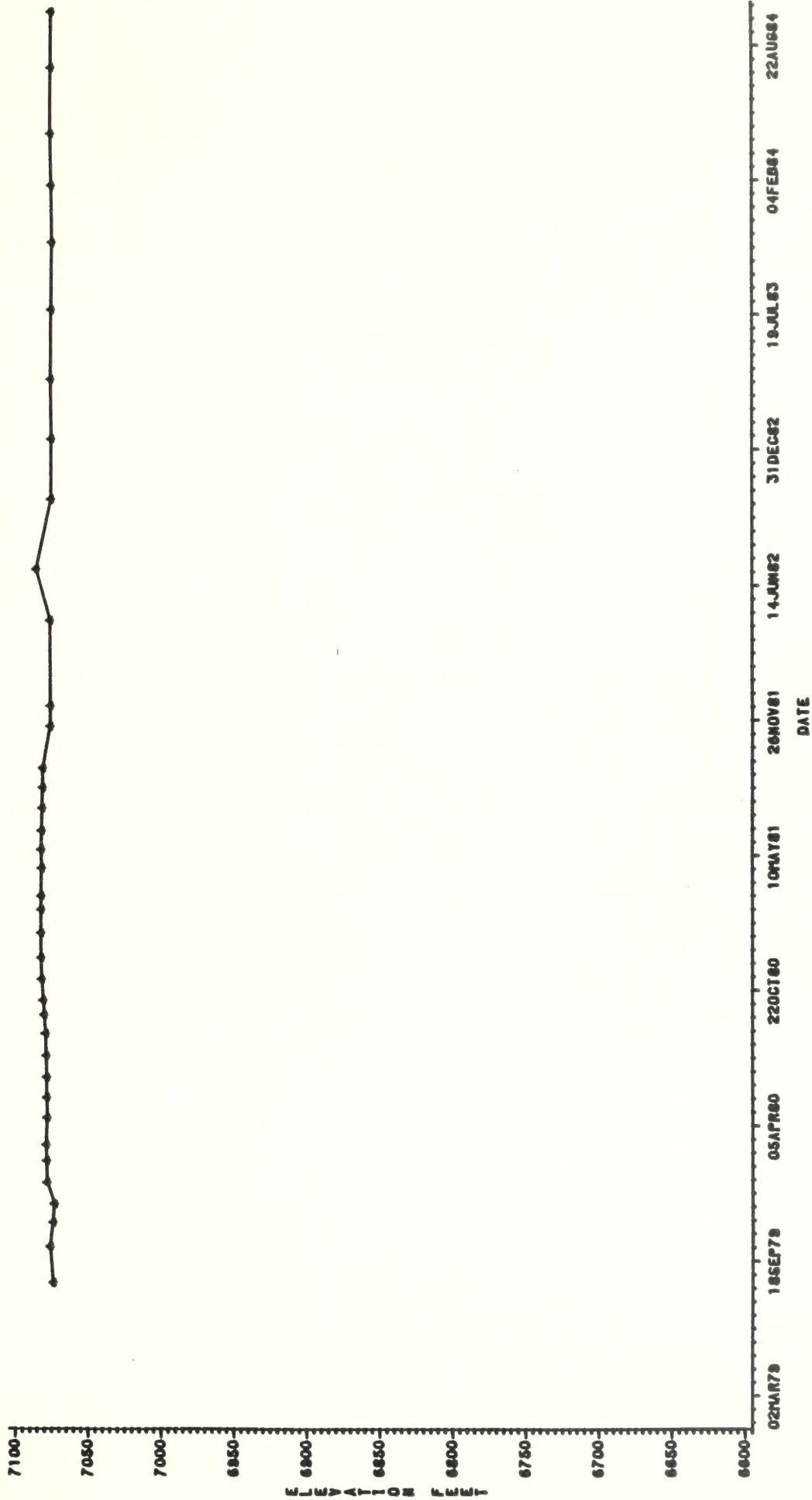
WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-W77





UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
WASHINGTON, D. C. 20250

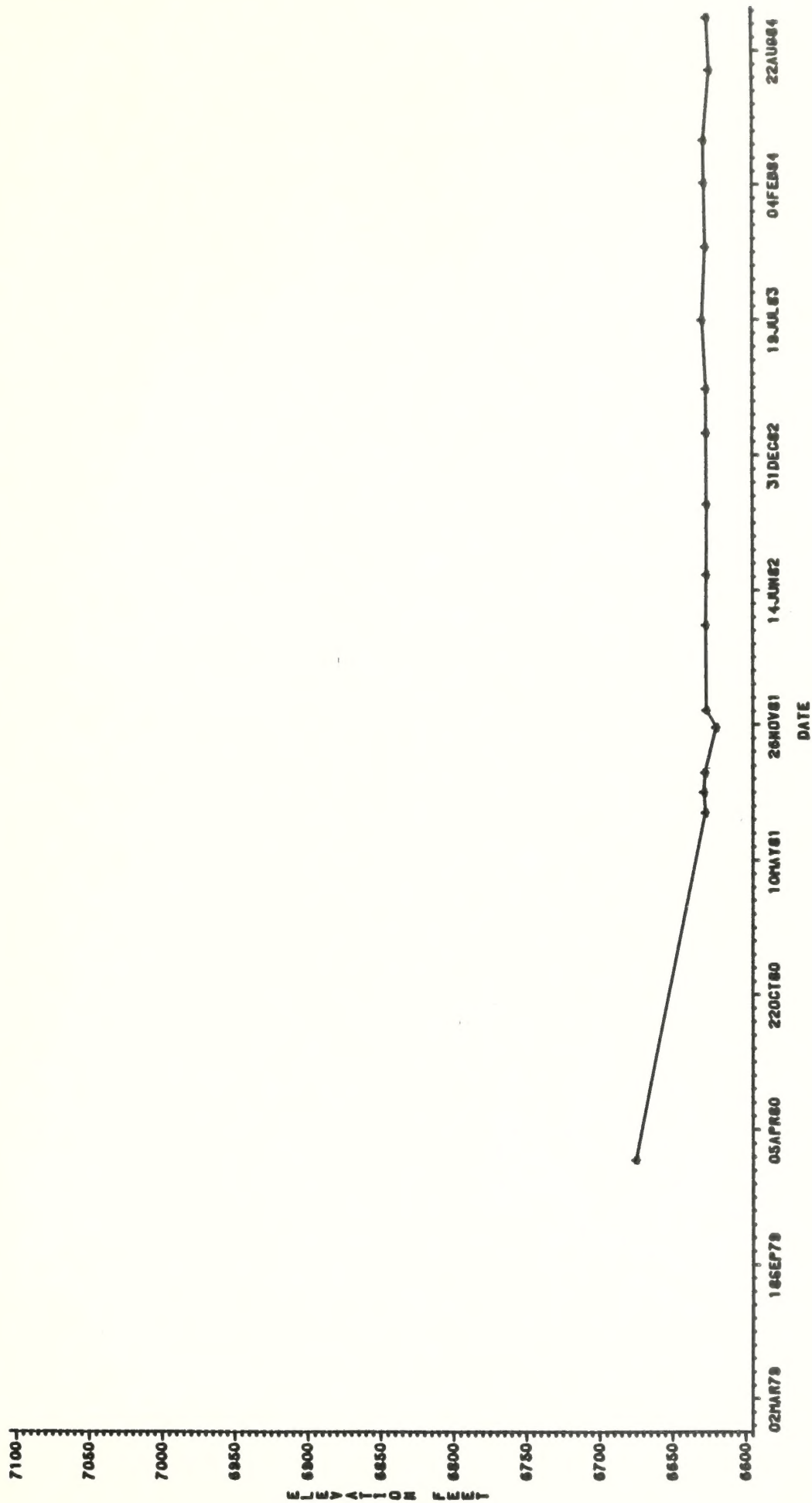
WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WY78





THE
MONTHLY
AVERAGE
OF THE
NUMBER
OF
HOURS
OF
SUNSHINE
AT
ST. LOUIS,
MO.,
FROM
1881
TO
1900

WATER LEVEL PLOTS OF LOWER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-M79





STATE OF TEXAS
COUNTY OF DALLAS
JANUARY 1, 1900

TABLE 1.2.1.4-18
PLOTS OF WATER LEVELS IN COMPOSITE WELLS

<u>Well No.</u>	<u>Computer Code</u>	<u>Page No.</u>
GREENO 404	WV01	I-187
OLDLAND 3	WV02	I-188
GP-17X-BG	WV03	I-189
BUTE 25	WV04	I-190
LIBERTY BELL 12	WV05	I-191
TG 71-1	WV10	I-192
AT-1A	WV37	I-193

TABLE 1. 1. 1. 1.

WATER LEVELS IN TUNNELS

Station	Water Level	Notes
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.
1. 1. 1.	1. 1. 1.	1. 1. 1.

WATER LEVEL PLOTS IN COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-WV01

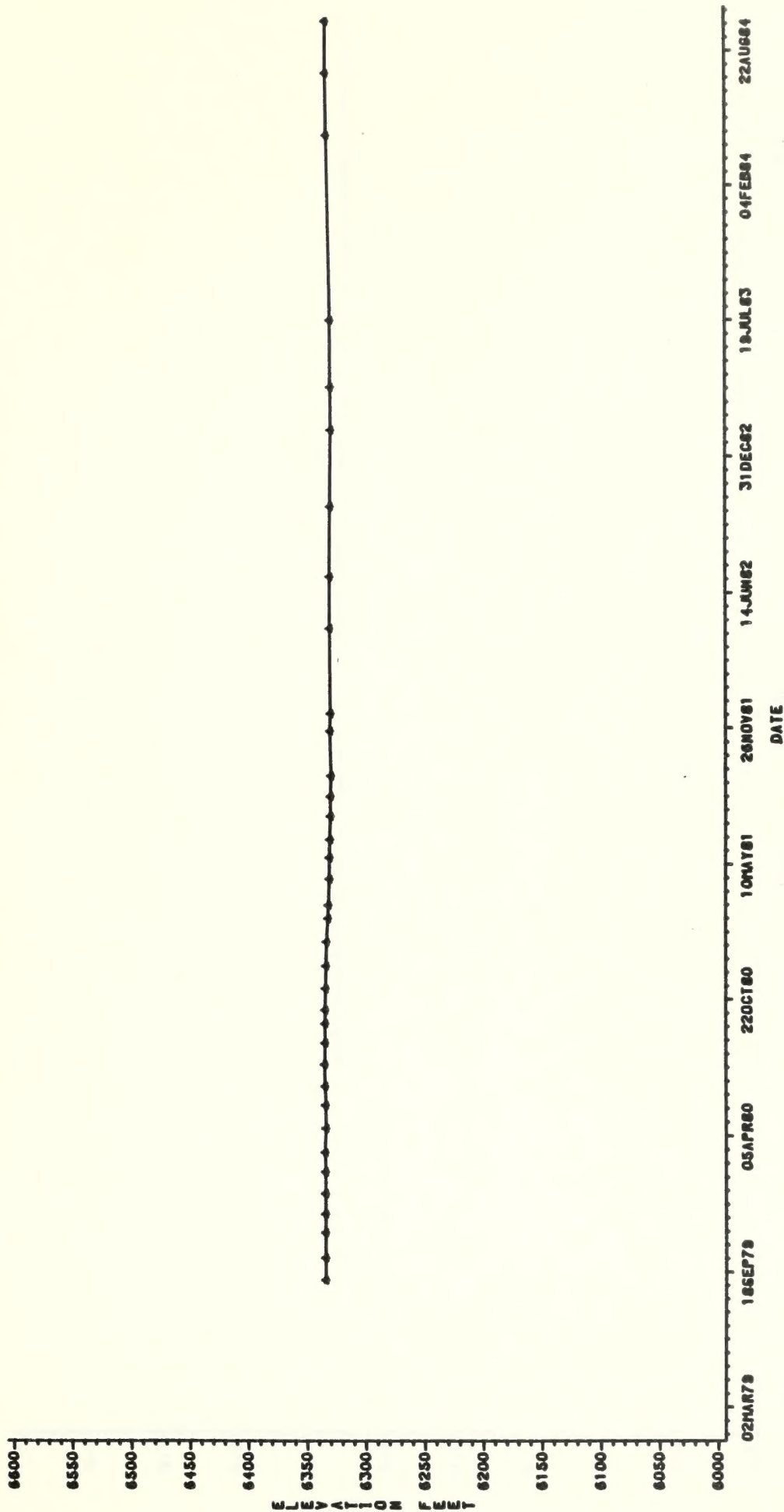


FIG. 2



THE EFFECT OF TEMPERATURE ON THE SOLUBILITY OF
VARIOUS POLYMERES IN CARBON TETRACHLORIDE

WATER LEVEL PLOTS OF COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-MW02

0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5

WATER LEVEL PLOTS

I- 138

02MAR79 18SEP79 05APR80 22OCT80 10MAY81 26NOV81 14JUN82 31DEC82 19JUL83 04FEB84 22AUG84

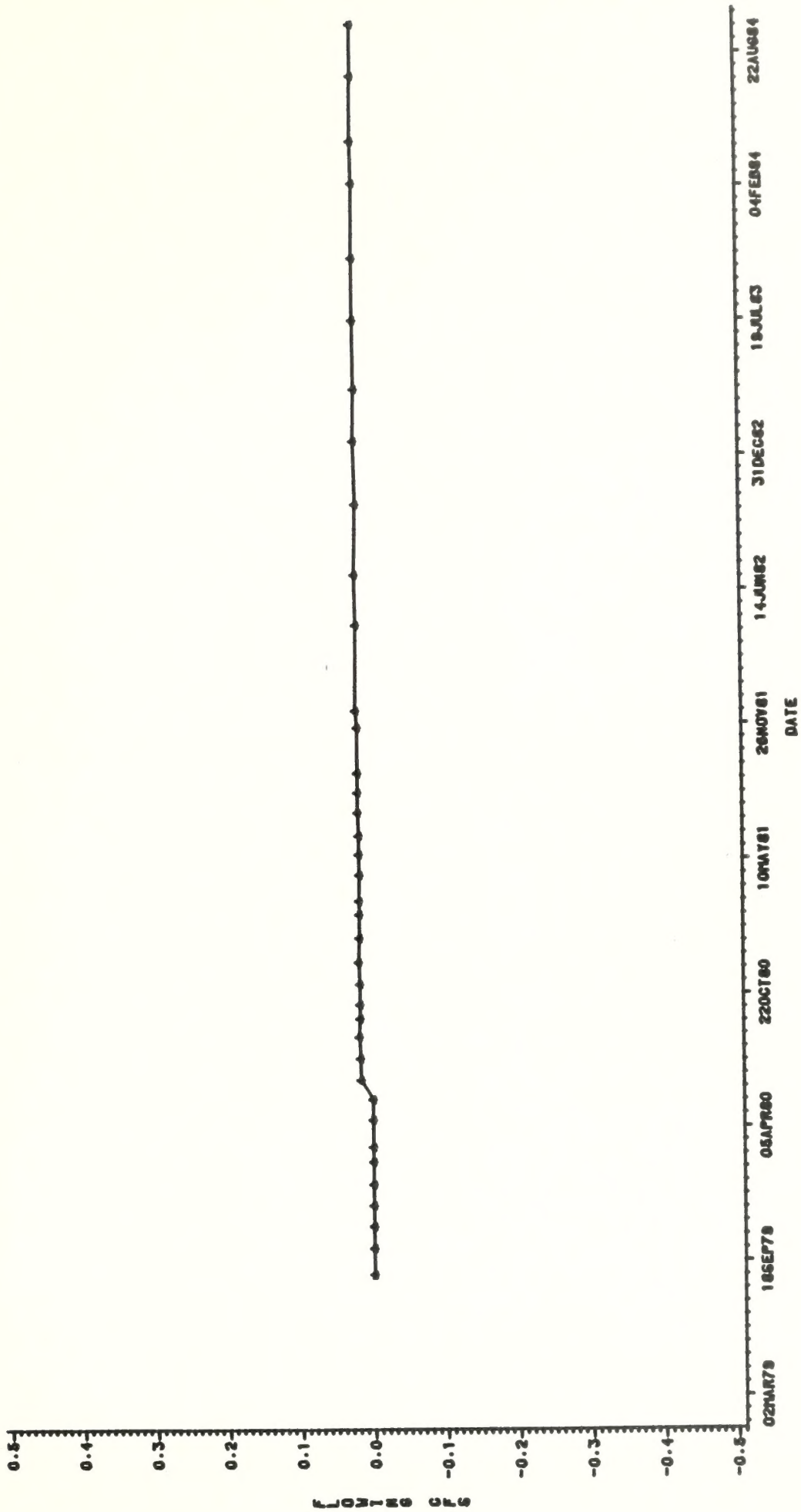
DATE



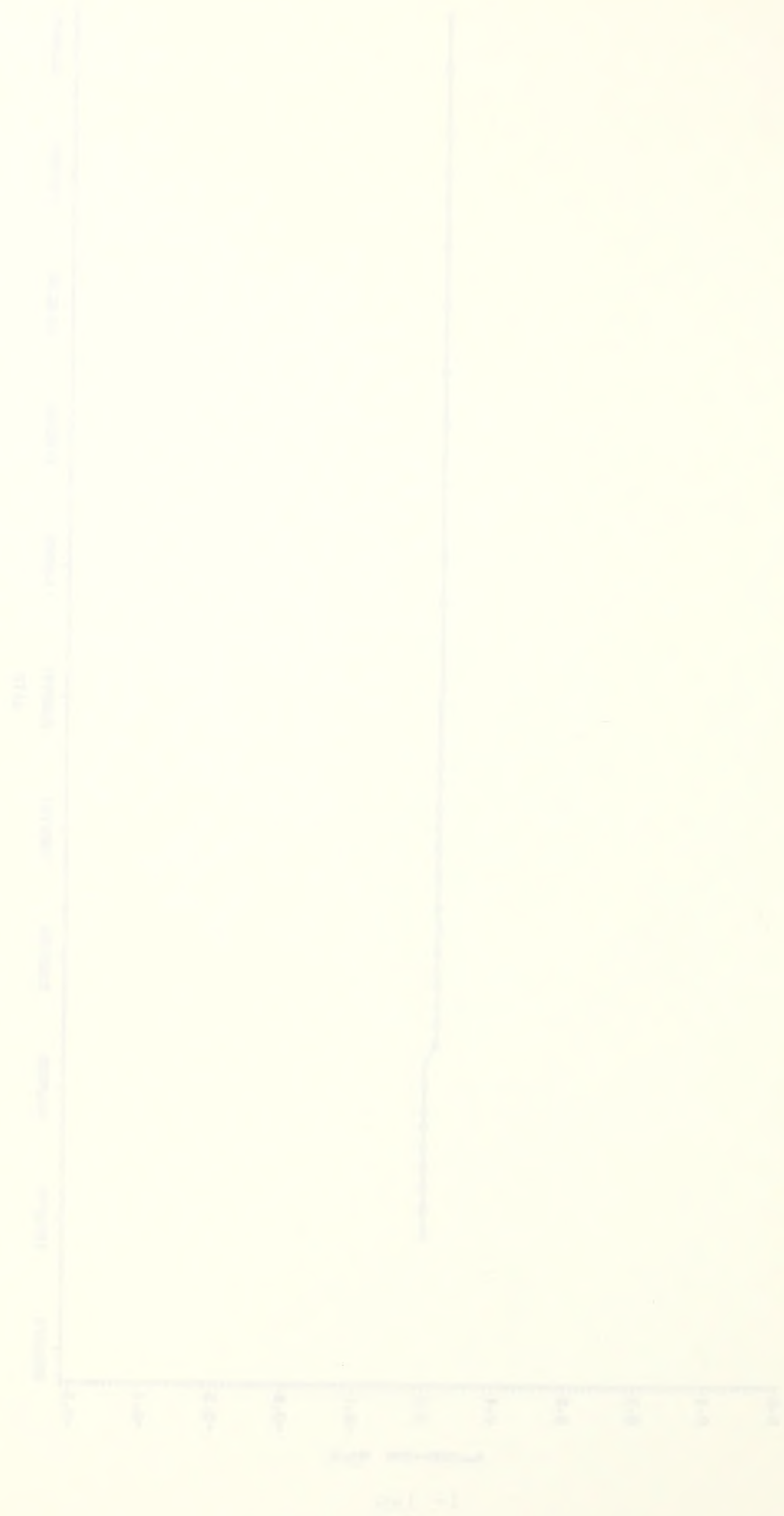


AVIATION
RESEARCH
AND
DEVELOPMENT
CORPORATION

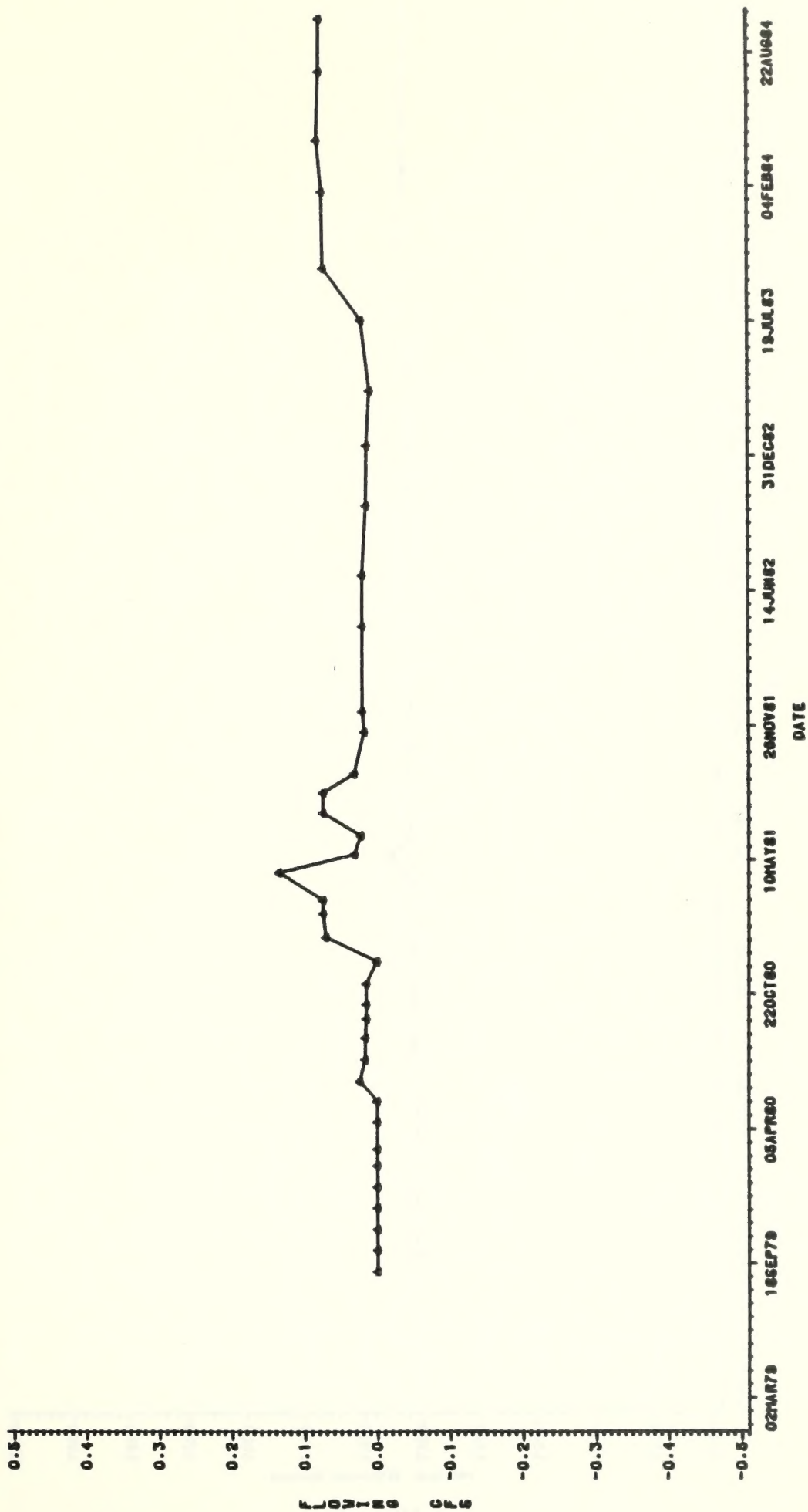
WATER LEVEL PLOTS IN COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-MV03



2115 21150000 IN 2115 21150000 2115 21150000 IN 2115 21150000 2115 21150000 IN 2115 21150000



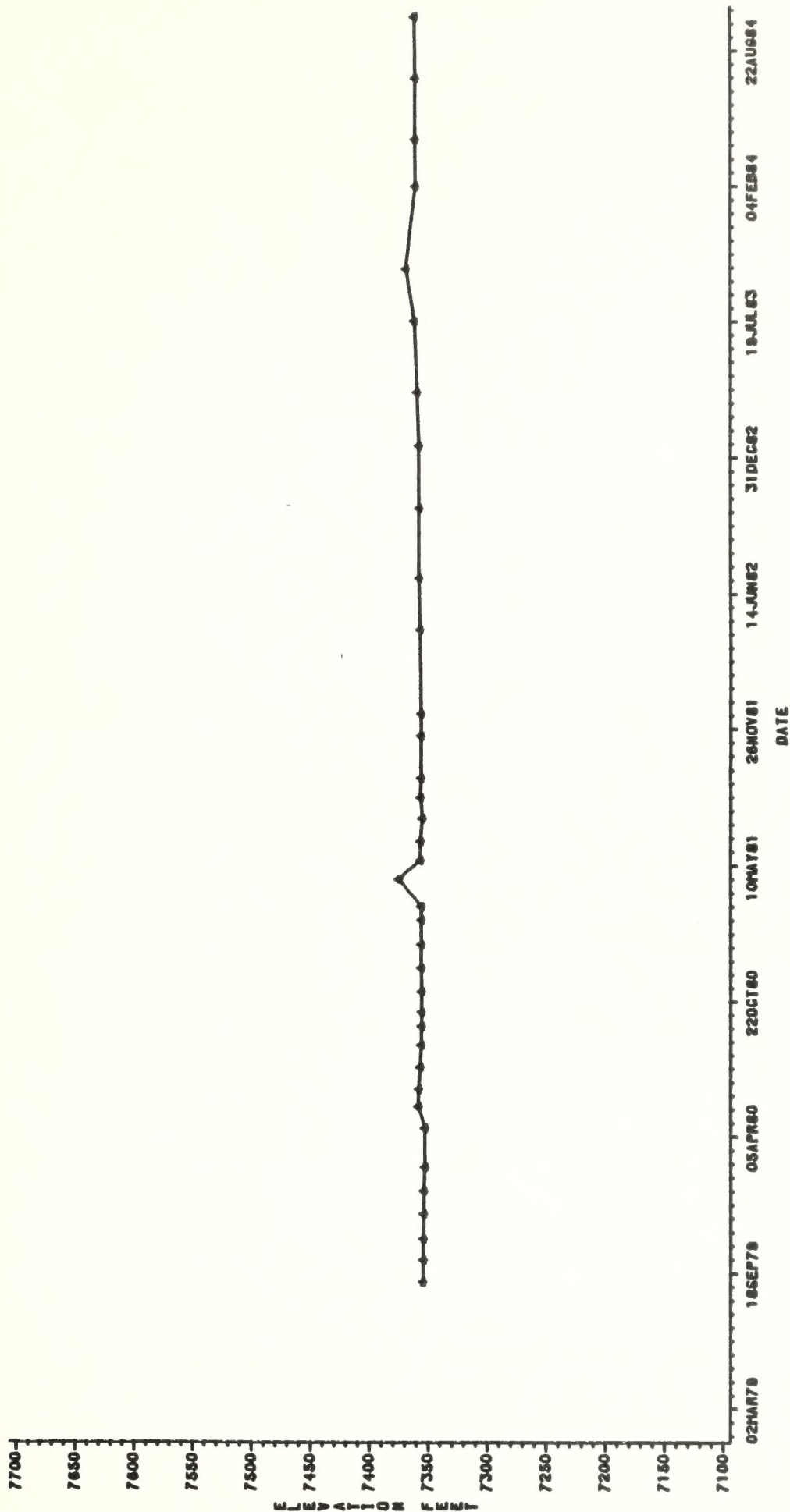
WATER LEVEL PLOTS OF COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WV04



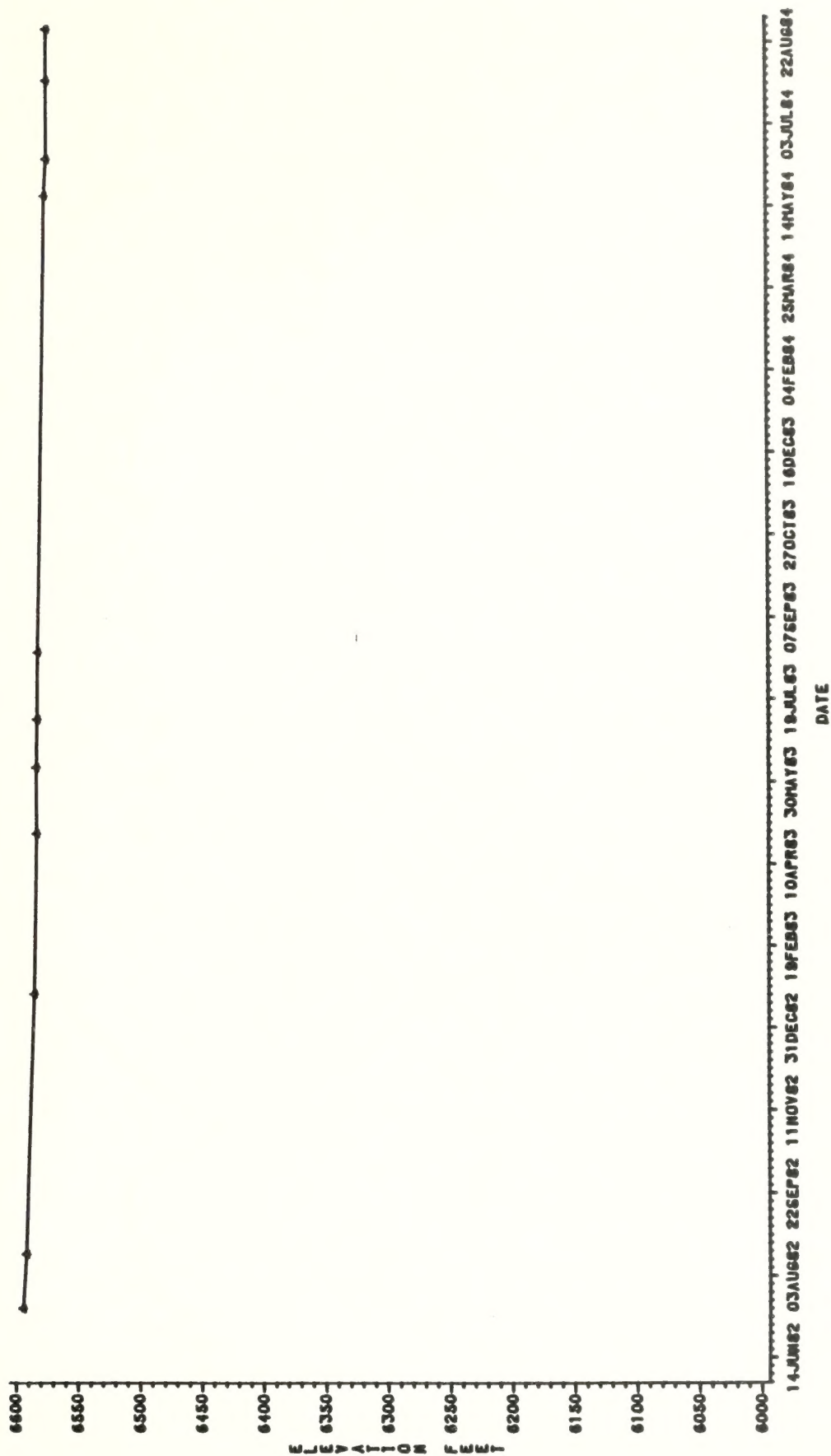


RESISTANCE (ohms) vs. FREQUENCY (Hz)

WATER LEVEL PLOTS OF COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOG-WV08



WATER LEVEL PLOTS IN COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WY10



1970

1000 900 800 700 600 500 400 300 200 100 0

1000 900 800 700 600 500 400 300 200 100 0

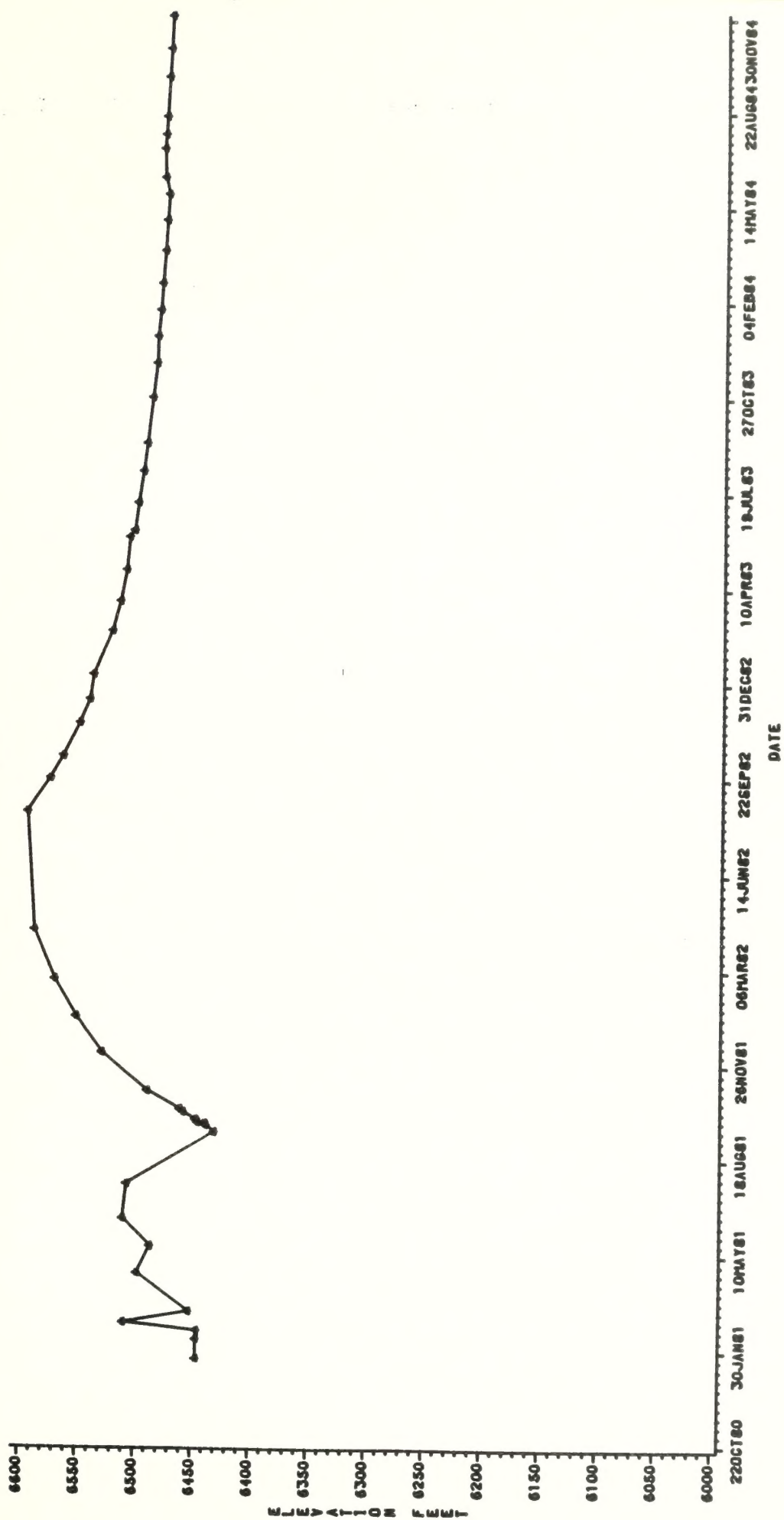
1000 900 800 700 600 500 400 300 200 100 0

SP-17

1000 900 800 700 600 500 400 300 200 100 0

1000 900 800 700 600 500 400 300 200 100 0

WATER LEVEL PLOTS IN COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN LOC-WV37



100



THEORY OF THE TRANSMISSION OF
WAVELENGTH 6.012 IN COMPOSITE MEDIA

IMPROVEMENTS/
LAND APPLICATION/
REINJECTION/DISCHARGE

1.2.1.5 Impoundments/Land Application/Reinjection/ Discharge

Discharging of mine water into Piceance Creek began in July 1979. Water samples for flow and quality analyses were taken at ponds A/B discharge point which is permitted outfall 002. Fluoride samples were taken in the field at A/B discharge point (WN40), above the discharge point on Piceance Creek (WN41), below the discharge point in No Name Gulch (WN42) just prior to confluence at Piceance Creek, and in Piceance Creek at Hunter Creek (USGS Station 061) (WU61). Data are reported for June through November 1984. Refer to Table 1.2.1.5-1 for flow and field measurements. Plots of flow, field fluoride, and specific conductance are presented in Figures 1.2.1.5-1 through 1.2.1.5-3 for A/B discharge (WN40). Water quality analyses are reported in Section 1.2.2.5.

C-b is also permitted for discharges at its runoff control basins which are designated as outfalls 001, 003 - 012. These normally do not overflow (discharge); however, heavy rains on August 1 and 16 caused overflow at the following basins:

<u>Outfall</u>	<u>Code</u>
001	WN51
003	WN53
005	WN55

These discharges are reported in Table 1.2.1.5-1.

Monthly levels samples were taken at wells 22X-17 (WI19) and 24X-17 (WI17) during June through November 1984. Data are presented in Table 1.2.1.5-2. These wells are designated as injection wells but have never been utilized as such and have been converted to monitoring wells. Plots of these wells for levels follow the data table in Figures 1.2.1.5-4 and 1.2.1.5-5.

Weekly levels readings were taken at pond seepage wells 41X13 (WW13) and 31X12 (WW22) while monthly levels samples were taken at the shale pile seepage well 32Y12 (WW32) during June through November 1984; see Table 1.2.1.5-3. Plots of the pond seepage wells are reported in Bedrock Well Section 1.2.1.4. Refer to Table 1.2.1.4-14 in that section for the corresponding page number. These wells are monitoring water levels in the UPC₁ zone and are reviewed monthly to detect any changes.

Monthly field samples were taken at Ponds A/B and C seepage monitoring wells (WW13 and WW22) in June through November 1984 while quarterly field samples were collected in June and November 1984 at the leachate shale pile monitoring well (WW32). See data Table 1.2.1.5-4.

Location of water stations presented in this sub-section can be referenced on Figure 1.2-1 (jacket map).

TABLE 1.2.1.5-1

CB-TRACT
NPDES DISCHARGE
DAILY FLOW

LOC	YR	MO	DY	FLOW (CFS)
---	--	--	--	-----
WN40	84	9	12	.710
			13	.710
			14	.710
			15	.690
			16	.730
			17	.750
			18	.560
			19	.770
			20	.770
			21	.730
			22	.730
			23	.600
			24	.800
			25	.800
			26	.700
			27	.730
			28	.710
			29	.700
			30	.700
	10		1	.750
			2	.700
			3	.710
			4	.760
			5	.730
			6	.730
			7	.730
			8	.610
			9	.450
			10	.290
			11	.280
			12	.450
			13	.500
			14	.710
			15	.740
			16	.700
			17	.690
			18	.680
			19	.700
			20	.700
			21	.730
			22	.690
			23	.690
			24	.710
			25	.740

TABLE 1.2.1.5-1 (Cont'd)

CB-TRACT
NPDES DISCHARGE
DAILY FLOW

LOC	YR	MO	DY	FLOW (CFS)
---	--	--	--	-----
WN40	84	10	26	.690
			27	.660
			28	.710
			29	.720
			30	.680
			31	.700
		11	1	.700
			2	.700
			3	.620
			4	.670
			5	.670
			6	.630
			7	.710
			8	.730
			9	.710
			10	.640
			11	.670
			12	.710
			13	.680
			14	.680
			15	.650
			16	.650
			17	.650
			18	.690
			19	.680
			20	.680
			21	.710
			22	.670
			23	.670
			24	.690
			25	.720
			26	.710
			27	.670

TABLE 1.2.1.5-1 (Cont'd)

CB-TRACT
NPDES DISCHARGE
WEEKLY FIELD MEASUREMENTS

LOC	YR	MO	DY	FLOW (CFS)	PH UNIT	SPECIFIC CONDUCTIVITY (MG/L)	DISS OXYGEN (MG/L)	FIELD FLUORIDE (MG/L)	TEMPERATURE (DEG C)
WN40	84	6	7	1.2000	8.7	1730.0			12.0
			13	.8260	8.8	2160.0			16.0
			20	.7750	8.8	2220.0			20.0
			27	.7270	8.7	2220.0			22.0
		7	2	.7510	8.7	2210.0		19.6	23.0
			10	.7270	8.7	2060.0		20.2	22.0
			11	.7800	8.8	2090.0			22.0
			18	.7510	8.7	2080.0		20.1	22.0
			25	.7510	8.7	2150.0		19.8	23.0
		8	1	.7270	8.7	2170.0		20.0	22.0
			9	.7030	8.9	2170.0		20.2	22.0
			15	.7750	8.8	2150.0		20.3	18.0
			21	.8790	8.9	2100.0		19.8	20.0
			29	.8790	8.9	2110.0		21.0	23.0
		9	5	.8260	8.9	2190.0		21.2	21.0
			12	.7030	8.9	2130.0		20.1	18.0
			20	.6350	8.8	2170.0		20.6	20.0
			26	.7030	8.9	2110.0		20.8	16.0
		10	3	-.6570				21.6	
			10	-.2300				20.9	
			17	-.5920				20.6	
			24	-.7030				21.1	
			31	.7030	8.9	2120.0			9.0
		11	7	.6350	8.9	2170.0		21.8	8.0
			14	.7030	8.9	2170.0		21.7	11.0
				.7030	8.9	2170.0			11.0
			23	.7030	8.9	2130.0		21.3	10.0
			28	.6800	8.8	2000.0		20.8	9.0
WN41	84	6	7					.6	
			13					.7	
			20					.8	
		7	2					.7	
			9					.6	
			18					.6	
			25					.7	
		8	1					.7	
			9					.7	
			15					.7	
			16		8.4	631.0			19.0
			21					.7	

NOTE: -INDICATES LESS THAN

TABLE 1.2.1.5-1 (Cont'd)

CB-TRACT
NPDES DISCHARGE
WEEKLY FIELD MEASUREMENTS

LOC	YR	MO	DY	FLOW (CFS)	PH UNIT	SPECIFIC CONDUCTIVITY (MG/L)	DISS OXYGEN (MG/L)	FIELD FLUORIDE (MG/L)	TEMPERATURE (DEG C)
WN41	84	8	29					.6	
		9	5					.6	
			12					.6	
			20					.6	
			26					.6	
	10	3						.7	
		10						.7	
		17						.7	
		24						.7	
	11	7						.6	
		14						.7	
		23						.7	
		28						.7	
42	84	6	7					.5	
			13					.8	
			20					.8	
		7	2					.8	
			9					.7	
			18					.7	
			25					.7	
	8	1						.7	
		9						.7	
		15						.7	
		21						.7	
		29						.7	
	9	5						.6	
		12						.7	
		20						.7	
		26						.7	
	10	3						.7	
		10						.7	
		17						.7	
		24						.7	
	11	7						.7	
		14						.7	
		23						.8	
		28						.8	
WN51	84	8	1	.1500	8.8	200.0			6.0
			16	-.7300	8.9	162.0			19.0
WN53	84	8	1	.0800	9.2	220.0			10.0

NOTE: -INDICATES LESS THAN

TABLE 1.2.1.5-1 (Cont'd)

CR-TRACT
NPDES DISCHARGE
WEEKLY FIELD MEASUREMENTS

LOC	YR	MO	DY	FLOW (CFS)	PH UNIT	SPECIFIC CONDUCTIVITY (MG/L)	DISS OXYGEN (MG/L)	FIELD FLUORIDE (MG/L)	TEMPERATURE (DEG C)
WN55	84	8	1	.0600	9.1	190.0			17.0
WU61	84	9	5					.6	
			12					.7	
			20					.7	
			26					.7	
	10	3						.7	
			10					.7	
			17					.7	
			24					.7	
	11	7						.7	
			14					.7	
			23					.8	
			28					.8	

NOTE: -INDICATES LESS THAN

C-B TRACT A/B DISCHARGE MONTHLY MEAN FLOW

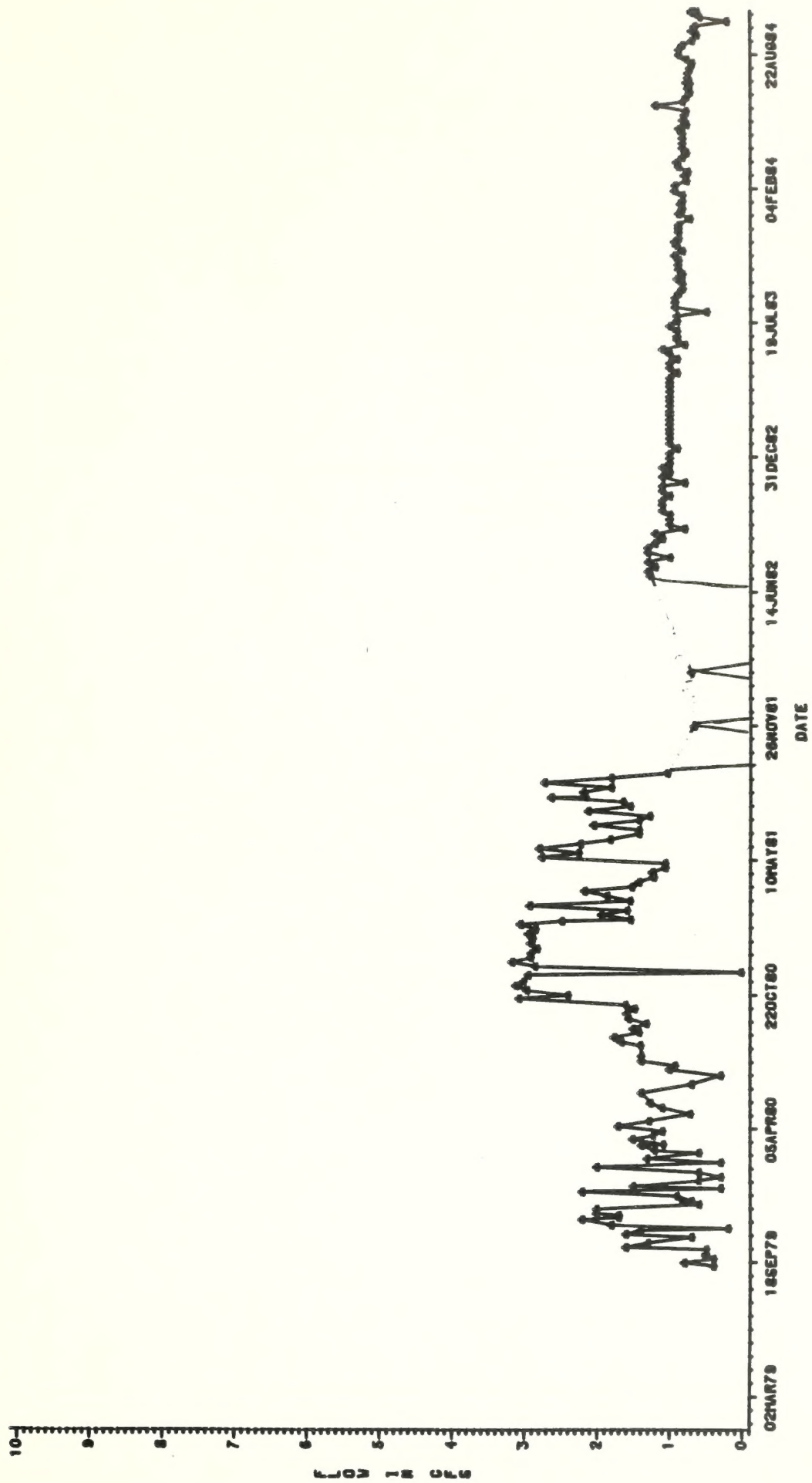


FIGURE 1.2.1.5-1

C-B TRACT A/B DISCHARGE FIELD FLUORIDE CONCENTRATIONS(MG/L)

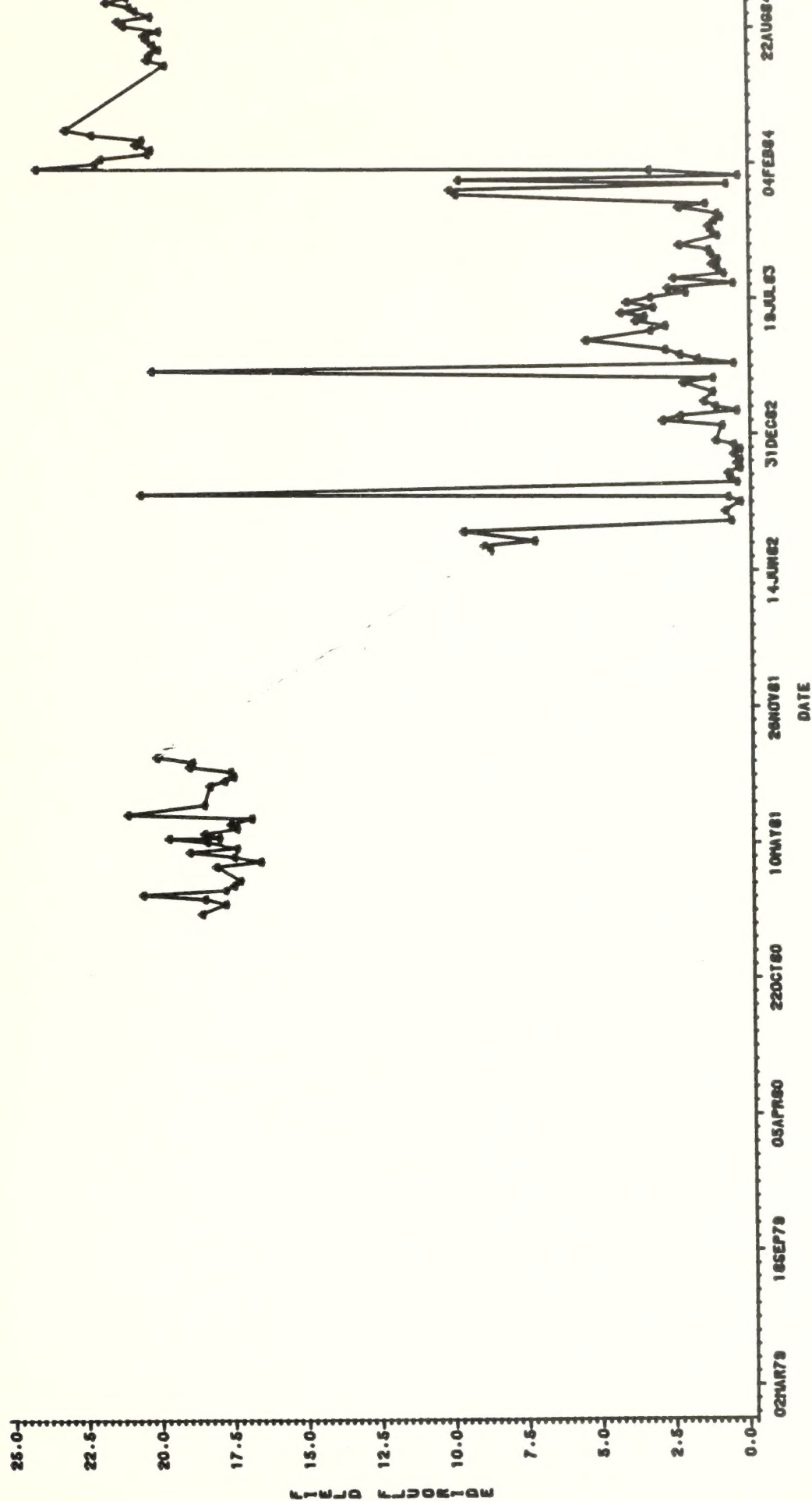


FIGURE 1.2.1.5-2

C-B TRACT A/B DISCHARGE SPECIFIC CONDUCTANCE (UMHOS)

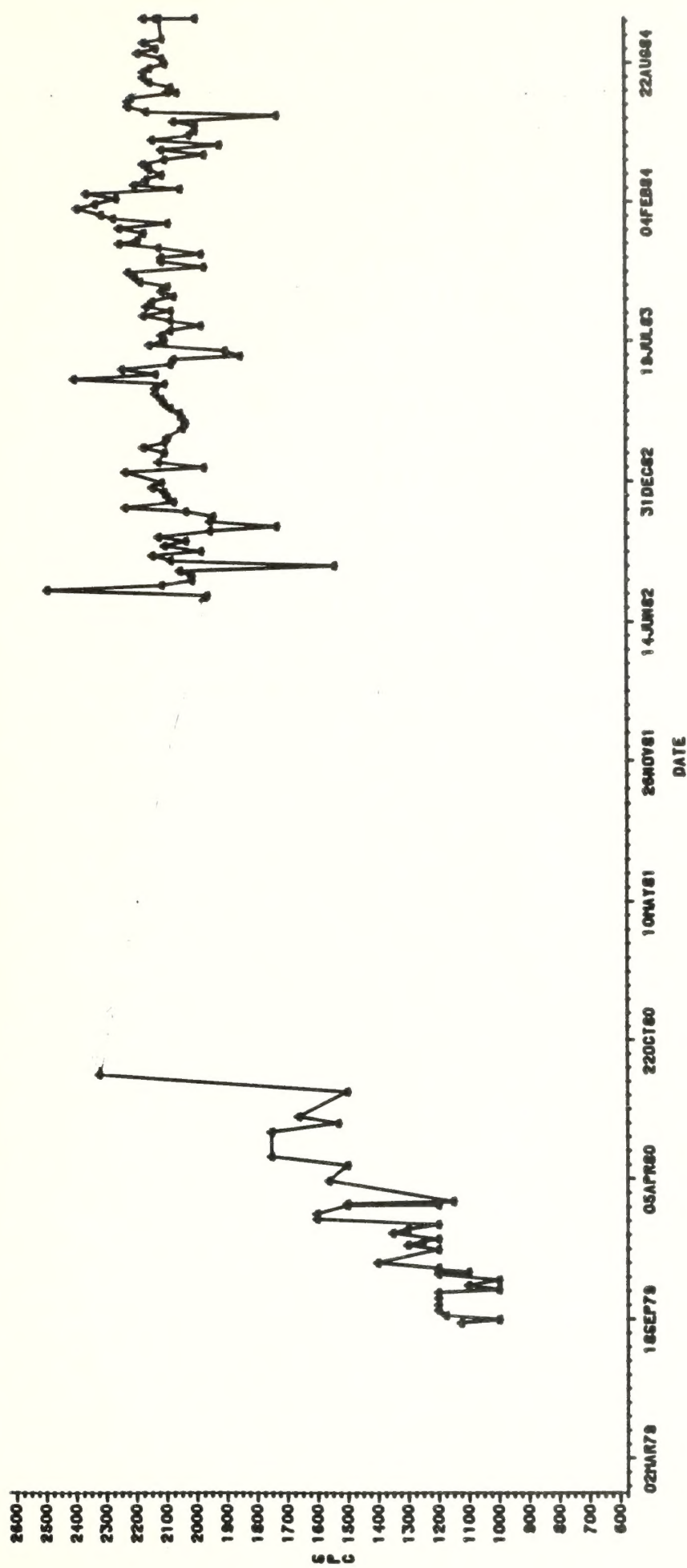


FIGURE 1.2.1.5-3

TABLE 1.2.1.5-2

CB-TRACT
WATER LEVELS FOR INJECTION WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WI17	WI19
			DEPTH	DEPTH
			(FT)	(FT)
YR	MO	DY		
84	6	13	6624.89	6536.20
	7	19	6624.39	6535.39
	8	27	6624.00	6535.20
	9	27	6623.60	6534.80
	10	25	6623.20	6534.40
	11	29	6623.50	6534.70

PLUGGD = WELL PLUGGED

DRY = WELL DRY

FLWING = WELL FLOWING

INACCS = WELL INACCESSABLE

TABLE 1.1.1-1

WATER LEVELS FOR JAWAHTON WELLS
FOR SAMPLE DATE 2000

WELL ID - 67 (Kane Station Level)

WELL ID	DATE	WELL ID	DATE	WELL ID	DATE
67-1	2000-01-15	67-2	2000-01-15	67-3	2000-01-15
67-4	2000-01-15	67-5	2000-01-15	67-6	2000-01-15
67-7	2000-01-15	67-8	2000-01-15	67-9	2000-01-15
67-10	2000-01-15	67-11	2000-01-15	67-12	2000-01-15
67-13	2000-01-15	67-14	2000-01-15	67-15	2000-01-15
67-16	2000-01-15	67-17	2000-01-15	67-18	2000-01-15
67-19	2000-01-15	67-20	2000-01-15	67-21	2000-01-15
67-22	2000-01-15	67-23	2000-01-15	67-24	2000-01-15
67-25	2000-01-15	67-26	2000-01-15	67-27	2000-01-15
67-28	2000-01-15	67-29	2000-01-15	67-30	2000-01-15

WELL ID - 68 (Kane Station Level)
WELL ID - 69 (Kane Station Level)
WELL ID - 70 (Kane Station Level)
WELL ID - 71 (Kane Station Level)

WATER LEVELS PLOT OF INJECTION WELL LOC-W117

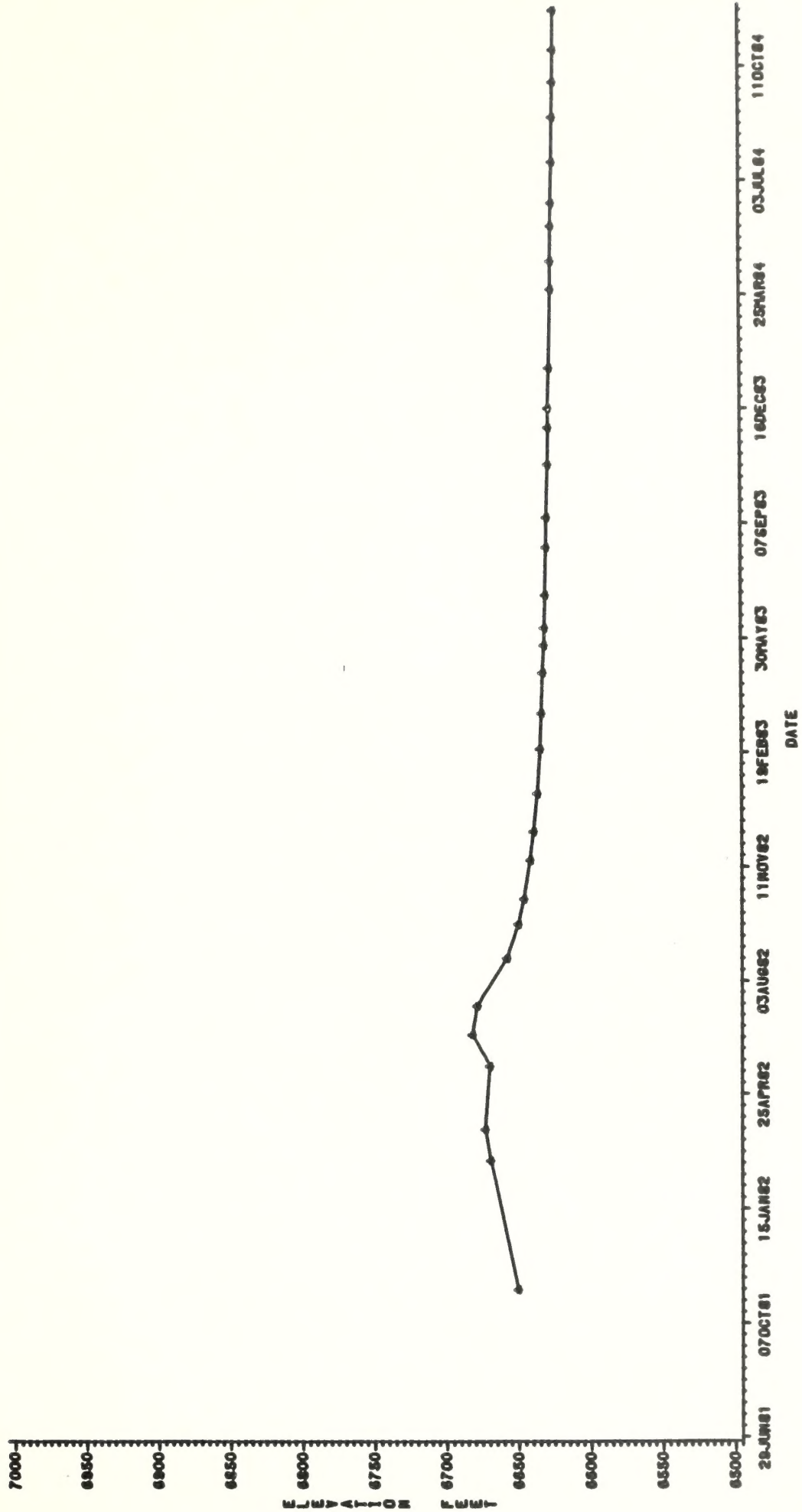


FIGURE 1.2.1.5-4

Station 1000 ft

1000



Station 1000 ft

WATER LEVELS PLOT OF INJECTION WELL Loc-4118

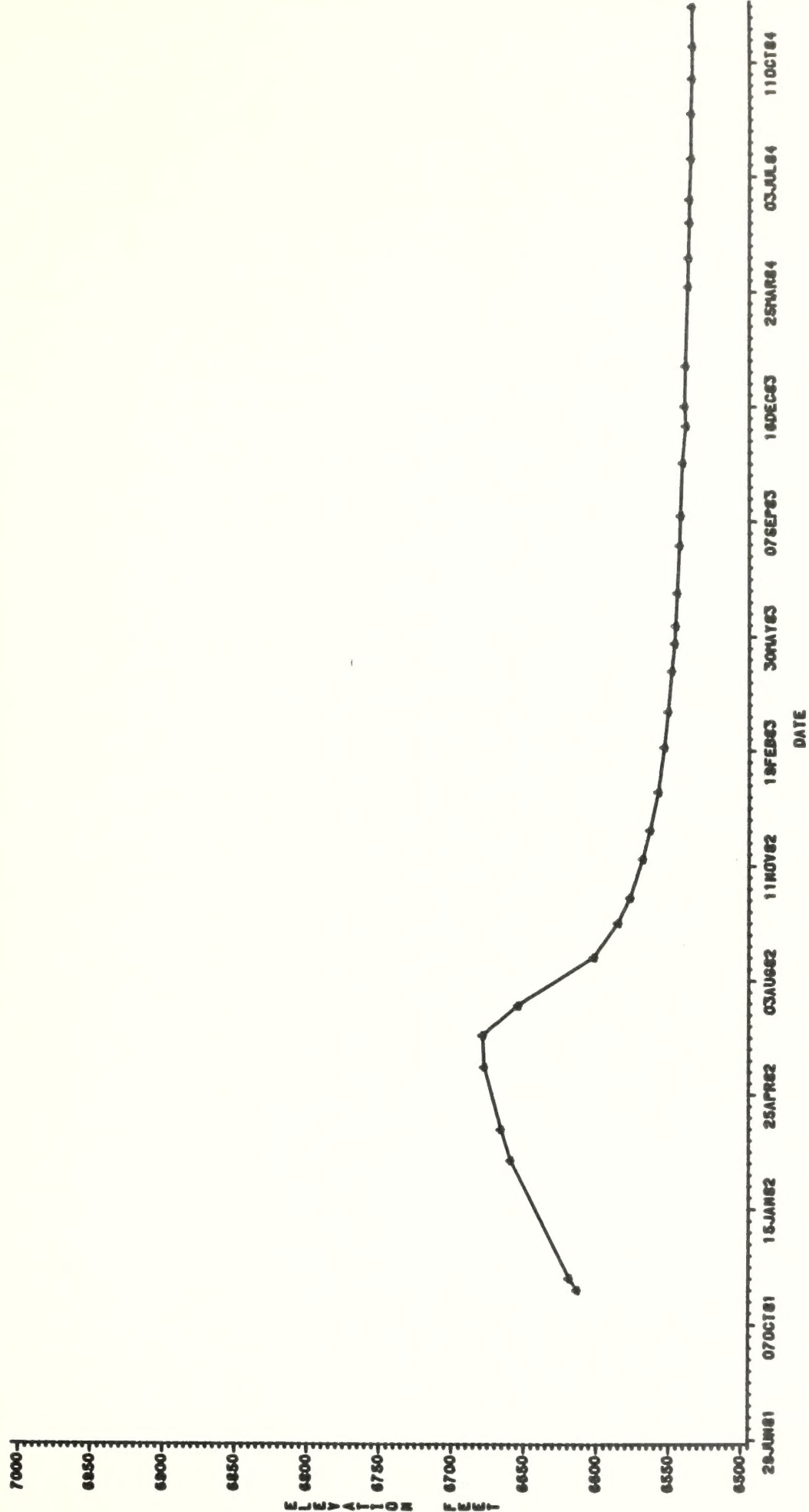


FIGURE 1.2.1.5-5

TABLE 1.2.1.5-3

C-8 TRACT
SEEPAGE MONITORING WELLS

YR	MO	DY	WW13 ELEV (FT)	WW22 ELEV (FT)	WW32 ELEV (FT)
<hr/>					
84	6	7	6602	6589	
		12		6589	
		18	6601		
		24		6590	
		28	6601	6590	6718
	7	4	6601	6590	
		9	6601	6591	
		17		6592	
		19	6601		
		26	6600	6592	
		31	6600	6590	6717
	8	6	6600	6593	
		14			6716
		16	6600	6594	
		21	6600	6594	
		30	6599	6595	
	9	10	6599	6596	
		17	6599	6596	6716
		26	6599	6596	
10		3	6599	6597	
		10	6598	6597	
		16	6598	6597	
		22			6716
		25	6598	6597	
11		7	6598	6598	
		15	6598	6598	
		23	6598	6598	
		29		6599	
		30	6597	6598	6716

TABLE 1.2.1.5-4

C-B TRACT
MONTHLY FIELD MEASUREMENTS
SEEPAGE MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	FIELD FLUORIDE (MG/L)
----	--	--	--	-----	-----	-----	-----
WW13	84	6	7				
			18	8.2	980.0	11.0	1.3
			28				
		7	4				
			9				
			19				
		8	26	8.5	868.0	12.0	
			31				
			6				
		9	16				
			21				
			30	8.8	860.0	13.0	1.2
		10	10				
			17	8.4	810.0	12.0	
			26				
		11	3				
			10				
			16				
WW22	84	6	25	8.3	850.0	11.0	1.1
			30				
			7				
		7	15				
			23				
			30	8.6	840.0	10.0	
		8	6				
			12				
			24				
		9	28	6.6	3180.0	13.0	
			4				
			9				
		10	17				
			26	7.6	3070.0	11.0	
			31				
		11	6				
			16				
			21				
		12	30	7.2	3050.0	12.0	.3
			10				
			17	7.8	2670.0	11.0	
		1	26				
			3				
			10				
			16				

TABLE 1.2.1.5-4 (Cont'd)

C-B TRACT
MONTHLY FIELD MEASUREMENTS
SEEPAGE MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	FIELD FLUORIDE (MG/L)
----	--	--	--	-----	-----	-----	-----
WW22	84	10	25	7.8	2690.0	11.0	.2
		11	7				
			15				
			23				
			29	8.3	2970.0	10.0	
			30				
WW32	84	6	28	7.2	1250.0	12.0	
		7	31				
		8	14				
		9	17	7.7	1150.0	12.0	
		10	22				
		11	30				

SHAFT AND
MINE WATER

1.2.1.6 Shaft and Mine Water

Water levels readings are continuing to be taken weekly since flooding the V/E shaft in September 1981 (Station WZ01). Data for June through November 1984 are included in this section along with a plot of water elevation in the shaft since recovery. See Table 1.2.1.6-1 and Figure 1.2.1.6-1.

A water usage report is submitted to the State Engineer's Office monthly. This report consists of all water used and pumped on the C-b Tract. Table 1.2.1.6-2 reports these waters in gallons coming from the various wells, ponds and shafts for 1984.

THEORY OF THE CASE

The first part of the case is the statement of the facts. This is followed by the statement of the law applicable to the facts. The third part is the conclusion of the court.

The second part of the case is the statement of the law applicable to the facts. This is followed by the statement of the law applicable to the facts. The third part is the conclusion of the court.

TABLE 1.2.1.6-1

CB-TRACT
SHAFT WATER LEVELS

			SHAFT WZ01 DEPTH
YR	MO	DAY	(FT)
84	6	5	6298.0000
		12	6297.6953
		19	6297.7969
		26	6297.7969
	7	3	6298.0977
		9	6298.2969
		17	6298.3945
		24	6298.5000
		30	6298.5977
	8	7	6298.8945
		14	6299.0977
		21	6299.1953
		28	6299.1953
	9	4	6299.1992
		11	6299.5977
		18	6299.1992
		25	6299.3984
	10	2	6299.5977
		9	6299.5977
		16	6299.8984
		23	6299.8984
		30	6300.0000
	11	6	6300.0000
		13	6299.8984
		19	6299.8984
		27	6299.6992

CB WELL LEVELS DATA

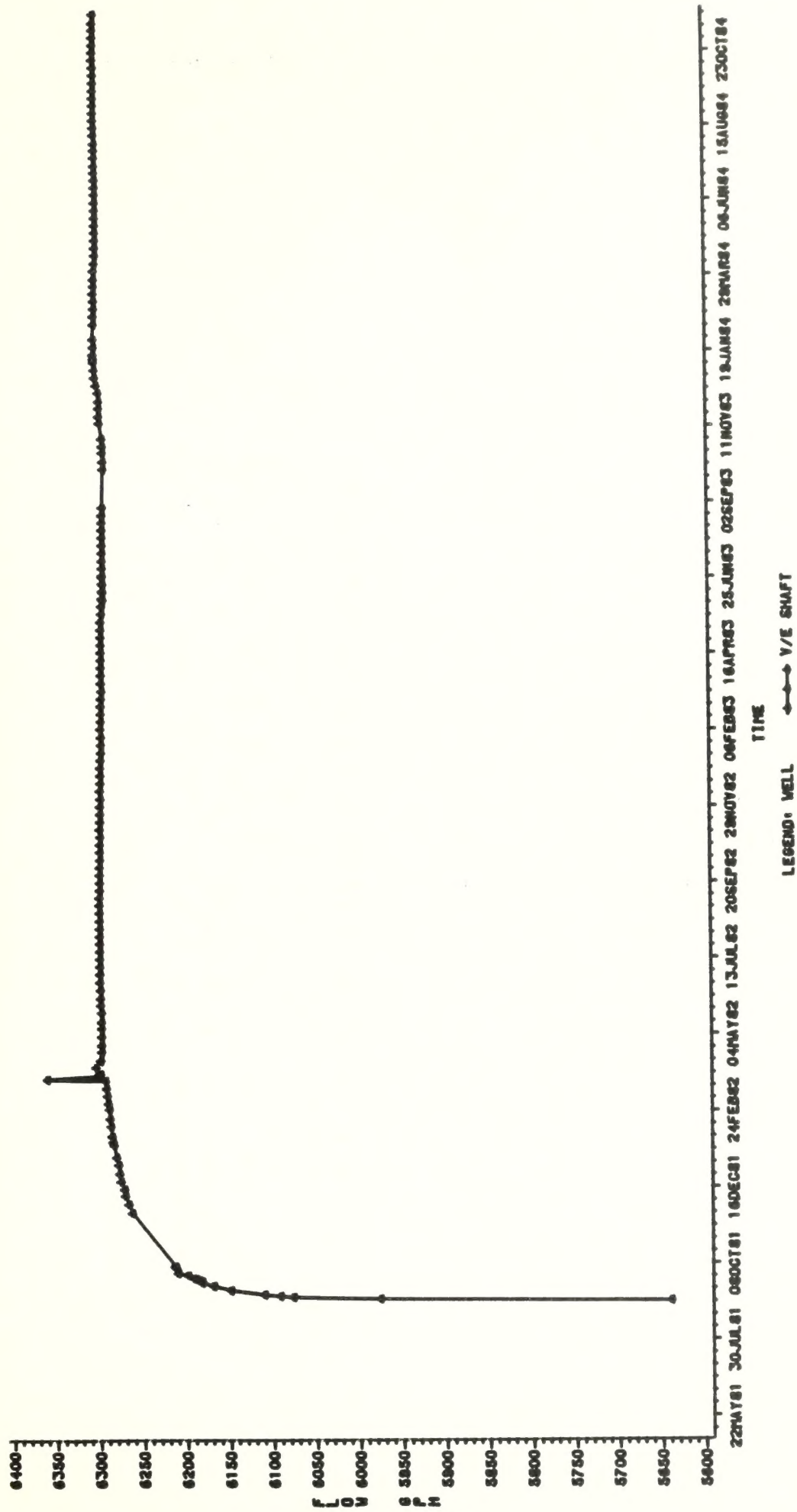


FIGURE 1.2.1.6-1

TABLE 1.2.1.6-2

:984 C-B WATER USAGE (1000 GALLONS, IN INCH FEET)

USE	SOURCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL YTD	TOTAL YRS TO
ALL SHIFTS	GLAND WTR PUMP STA													190.6	584.98
*TOTAL ALL SHIFTS															
														190.6	584.98
OFF-TRACT WTR US POTABLE TUN RIFLE															
														1.3	4.06
*TOTAL OFF-TRACT WTR US															
														1.3	4.06
TRACT WATER USED BATCH PLINT 24X-25															
														2.4	7.58
CONSTR	PONDS	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.06	18.1
		.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.18	55.58
CONSTR	24X-25													.06	1.8
														.18	5.88
DUST CNL	PONDS													.02	6.7
														.06	20.68
EVP & LEAK	POND C													144.8	444.48
														1.171.6	3.595.18
NPDES REL	PONDS	16.98	15.50	16.38	15.53	15.78	15.14	14.33	13.80	13.79	13.18	13.11		163.52	1.171.6
		52.108	47.588	50.288	47.858	48.428	46.468	43.978	42.348	42.318	40.448	40.238		501.758	3.595.18
REINJECT	PONDS													225.7	692.68
														79.0	242.58
SPR IRRIG	POND C														
*TOTAL TRACT WATER USED															
		18.99	15.51	16.39	15.54	15.80	15.17	14.34	13.81	13.80	13.19	13.12		163.86	1.650.3
		52.138	47.598	50.298	47.888	48.488	46.558	44.008	42.378	42.348	40.478	40.268		502.188	5.083.88
WATER IN STORAGE -															
	POND A	1.00	1.00	1.00	1.00	1.00					1.50	1.50			
		3.078	3.078	3.078	3.078	3.078					4.608	4.608			
	POND B	.15	.15	.15	.15	.15	.15	.15	1.50	1.50	.70	.70			
		.468	.468	.468	.468	.468	.468	.468	4.608	4.608	2.158	2.158			
	POND C														
*TOTAL WATER IN STORAGE															
		1.15	1.15	1.15	1.15	1.15	.15	.15	1.50	1.50	2.20	2.20			
		3.538	3.538	3.538	3.538	3.538	.668	.668	4.608	4.608	6.758	6.758			
WATER PUMPED															
	33X-1													4.3	13.28
	24X-25													.06	8.1
	32X-12													24.98	5.9
														18.08	678.9
	V/E SHIFT													2.083.18	
	PROD & SERV	17.92	16.53	17.52	16.82	16.92	16.85	17.35	17.14	16.35	16.46	15.60		185.46	1.229.9
		54.998	50.728	53.768	51.618	51.928	51.708	53.248	52.598	50.178	50.518	47.878		569.078	3.773.88
*TOTAL WATER PUMPED															
		17.92	16.53	17.52	16.82	16.93	16.87	17.36	17.15	16.36	16.46	15.60		185.52	1.927.0
		54.998	50.728	53.768	51.618	51.958	51.768	53.278	52.628	50.208	50.518	47.878		569.258	5.913.08

PROJECT DUMPS

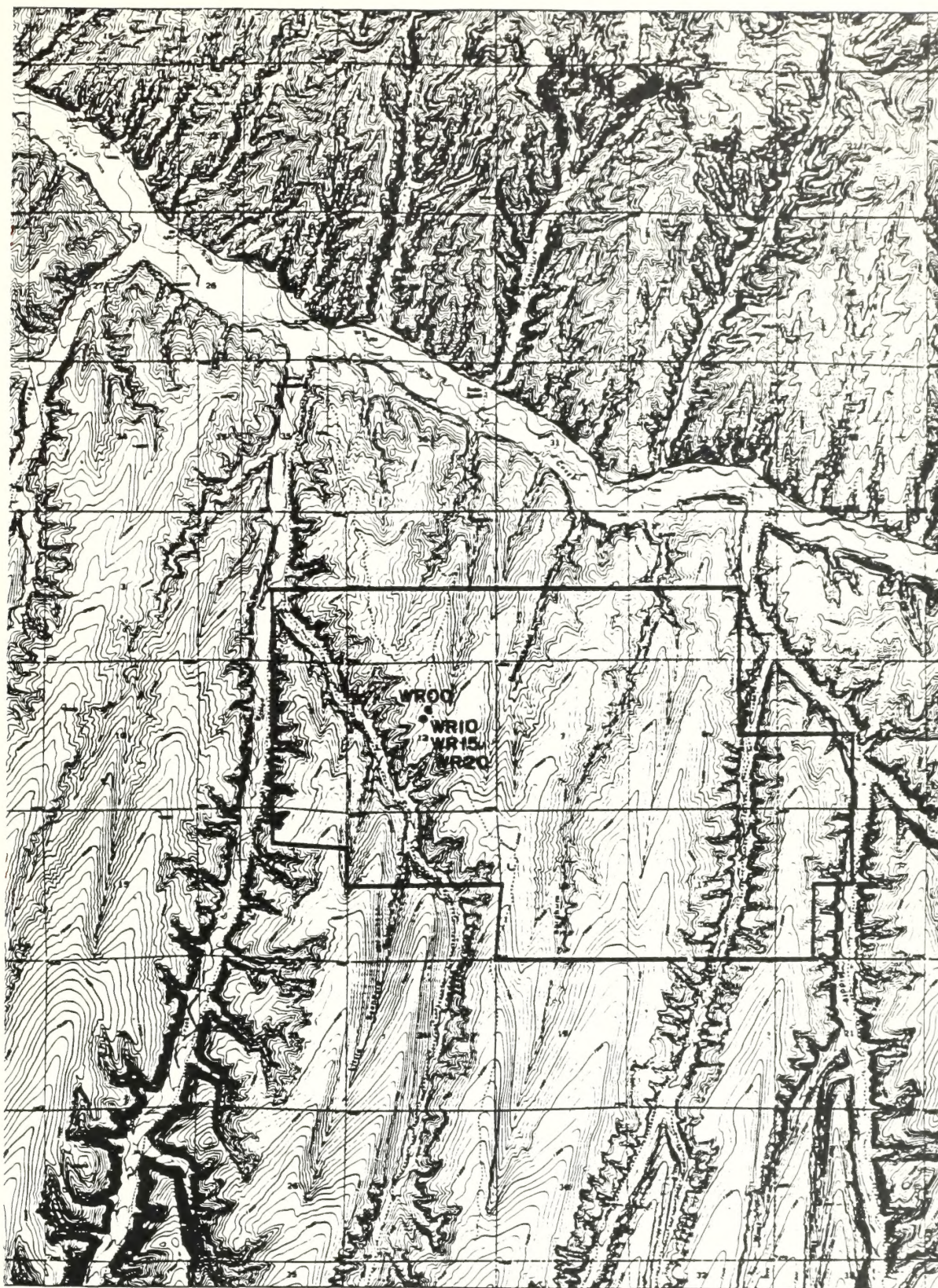
1.2.1.7 Shale Dumps

Locations of the raw and spent shale piles are represented in Figure 1.2.1.7-1 where WR10, WR15 and WR20 is the raw shale pile with leachate levels at 10, 15, and 20 feet depth respectively. WR00 is the spent shale pile location with leachate collected at one level.

Leachate data from the raw shale pile were collected from the lysimeters for April and May 1984. The leachates are initiated from precipitation percolating (leaching) through the raw shale to the collectors. Collector bottles are designated A thru E. Test set up was described in the 1981 C.B. Annual Report.

Field measurement (pH, DO, conductivity and temperature) data are collected at the lysimeters at three depths (Table 1.2.1.7-1). Associated leachate volumes collected are given on Table 1.2.1.7-2. Chemical analyses are analyzed and reported by Colorado State University.

Field measurements of pH, conductivity and temperature at the spent shale demonstration plot were initiated in May 1984 and are presented on Table 1.2.1.7-3.



LOCATIONS OF RAW AND SPENT SHALE PILES

FIGURE 1.2.1.7-1

TABLE 1.2.1.7-1

Raw Shale Lysimeter - CB Lab Analysis. Samples were taken from collection bottles designated 10E, 15A and 20A.

DATE	10E			15A			20A		
	CONDUCTIVITY (mmhos)	TEMP (°C)	pH	CONDUCTIVITY (mmhos)	TEMP (°C)	pH	CONDUCTIVITY (mmhos)	TEMP (°C)	pH
05/04/84	4.32	7	7.73	4.48	11	7.84	6.50	11	7.94
05/07/84	4.38	2	7.83	4.90	2	7.93	6.05	2	8.01
05/09/84	4.97	4	8.03	5.35	5	8.04	7.02	5	8.01
05/11/84	4.98	16	8.14	5.05	21	7.97	6.69	20	7.96
05/14/84	4.78	11	8.11	4.80	14	7.84	6.47	14	7.68
05/16/84	4.91	15	8.06	4.88	18	7.76	6.60	18	7.70
05/21/84	5.15	18	8.08	4.92	20	7.70	6.74	20	7.60
05/29/84	5.45	18	8.27	4.95	23	7.90	6.89	23	7.77
06/01/84	4.58	10	8.07	3.74	10	7.88	2.98	10	7.82
06/04/84	4.51	11	7.92	4.32	10	7.67	4.11	10	7.80
06/18/84	5.19	13	8.09	5.01	14	7.86	6.61	14	7.99
06/22/84	5.39	16	-	5.10	17	-	6.89	17	-
07/17/84	5.82	17	8.09	4.85	17	7.84	6.31	17	7.95
07/27/84	5.91	22	8.12	4.96	22	7.97	7.04	22	8.08
08/02/84	6.07	18	8.26	4.99	17	7.90	6.98	17	8.10
08/09/84	5.85	12	8.28	4.76	12	7.96	6.32	12	8.25
08/14/84	5.24	18	8.27	5.00	20	7.83	6.95	21	8.23
08/20/84	4.46	16	8.00	4.30	16	7.80	3.82	16	8.13
08/21/84	4.12	19	8.12	4.78	19	7.87	2.50	19	8.34
08/22/84	4.51	21	8.02	4.46	23	7.85	4.08	22	8.34
08/23/84	4.81	18	8.20	4.72	17	7.84	4.92	18	8.54
08/31/84	5.05	20	8.25	4.81	22	7.86	5.75	22	8.61
09/26/84	5.30	11	8.23	4.65	11	8.32	6.22	11	8.22
10/22/84	-	-	-	3.39	20	8.19	3.85	20	8.10
10/26/84	-	-	-	4.33	5	8.17	6.02	5	8.19
11/01/84	-	-	-	4.04	5	8.20	5.93	5	8.27

TABLE 1.5.1.1

Raw Data / 2 months - 20 / 40 days / 100 / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 / 25600 / 51200 / 102400 / 204800 / 409600 / 819200 / 1638400 / 3276800 / 6553600 / 13107200 / 26214400 / 52428800 / 104857600 / 209715200 / 419430400 / 838860800 / 1677721600 / 3355443200 / 6710886400 / 13421772800 / 26843545600 / 53687091200 / 107374182400 / 214748364800 / 429496729600 / 858993459200 / 1717986918400 / 3435973836800 / 6871947673600 / 13743895347200 / 27487790694400 / 54975581388800 / 109951162777600 / 219902325555200 / 439804651110400 / 879609302220800 / 1759218604441600 / 3518437208883200 / 7036874417766400 / 14073748835532800 / 28147497671065600 / 56294995342131200 / 112589990684262400 / 225179981368524800 / 450359962737049600 / 900719925474099200 / 1801439850948198400 / 3602879701896396800 / 7205759403792793600 / 14411518807585587200 / 28823037615171174400 / 57646075230342348800 / 115292150460684697600 / 230584300921369395200 / 461168601842738790400 / 922337203685477580800 / 1844674407370955161600 / 3689348814741910323200 / 7378697629483820646400 / 14757395258967641292800 / 29514790517935282585600 / 59029581035870565171200 / 118059162071741130342400 / 236118324143482260684800 / 472236648286964521369600 / 944473296573929042739200 / 1888946593147858085478400 / 3777893186295716170956800 / 7555786372591432341913600 / 15111572745182864683827200 / 30223145490365729367654400 / 60446290980731458735308800 / 120892581961462917470617600 / 241785163922925834941235200 / 483570327845851669882470400 / 967140655691703339764940800 / 1934281311383406679529881600 / 3868562622766813359059763200 / 7737125245533626718119526400 / 15474250491067253436239052800 / 30948500982134506872478105600 / 61897001964269013744956211200 / 123794003928538027489912422400 / 247588007857076054979824844800 / 495176015714152109959649689600 / 990352031428304219919299379200 / 1980704062856608439838598758400 / 3961408125713216879677197516800 / 7922816251426433759354395033600 / 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180925139433306555349329664076074856020734351040063381196360324551679567462400 / 361850278866613110698659328152149712041468702080126762392720649103359134924800 / 723700557733226221397318656304299424082937404160253524785441298206718269849600 / 1447401115466452442794637312608598848165874808320507049570882596413436539699200 / 2894802230932904885589274625217197696331749616641014099141765192826873079398400 / 5789604461865809771178549250434395392663499233282028198283530385653746158796800 / 11579208923731619542357098500868790785326998466564056396567060771307492317593600 / 23158417847463239084714197001737581570653996933128112793134121542614984635187200 / 46316835694926478169428394003475163141307993866256225586268243085229969270374400 / 92633671389852956338856788006950326282615987732512451172536486170459938540748800 / 185267342779705912677713576013900652565231975465024902345072972340919877081497600 / 370534685559411825355427152027801305130463950930049804690145944681839754162995200 / 741069371118823650710854304055602610260927901860099609380291889363679508325990400 / 1482138742237647301421708608111205220521855803720199218760583778727359016651980800 / 2964277484475294602843417216222410441043711607440398437521167557454718033303961600 / 5928554968950589205686834432444820882087423214880796875042335114909436066607923200 / 11857109937901178411373668864889641764174846429761593750084670229818872133215846400 / 23714219875802356822747337729779283528349692859523187500169340459637744266431692800 / 47428439751604713645494675459558567056699385719046375000338680919275488532863385600 / 94856879503209427290989350919117134113398771438092750000677361838550977065726771200 / 189713759006418854581978701838234268226797542876185500001354723677101954131453542400 / 379427518012837709163957403676468536453595085752371000002709447354203

TABLE 1.2.1.7-1 (cont'd)

CB-TRACT
RAW AND SPENT SHALE PILES

LOC	YR	MO	DY	PH PH UNIT	SPECIFIC CONDUCTANCE (UMHOS/CM)	TEMPERATURE (DEG C)
---	--	--	--	-----	-----	-----
WR00	84	6	7	7.7	20900.0	10.6
			11	8.1	17700.0	11.6
WR10	84	6	7	7.8	3860.0	11.9
			11	8.0	4740.0	9.3
WR15	84	6	7	7.8	3880.0	11.1
			11	7.9	4530.0	8.6
WR20	84	6	7	7.8	2390.0	9.7
			11	7.9	4630.0	8.5

TABLE 1.2.1.7-2
1984 Raw Shale Lysimeter Volumes (Liters)

DATE	10E	15A	15D	15E	20A	20D	20E	COMMENTS
04/26/84	-	2.0	-	-	2.0	-	-	
04/30/84	11.5	2.0	4.6	-	1.0	19.0	-	
05/02/84	8.0	2.0	X	-	2.0	12.0	0.5	15D Leaking
05/03/84	6.5	2.0	X	-	2.0	7.5	-	15D Still Leaking
05/04/84	8.0*	2.0	13.8	-	2.0	9.5	-	(Leak Fixed) *Overflowing
05/07/84	8.0	2.0	11.4	-	2.0	19.0	-	
05/09/84	4.9	2.0	8.6	-	2.0	11.1	0.8	
05/11/84	3.6	2.0	8.3	1.8	2.0	11.2	-	
05/14/84	2.8	2.0	8.2	-	2.0	12.5	-	
05/16/84	2.0	2.0	4.2	0.7	2.0	7.2	-	
05/21/84	3.7	2.0	9.8	-	2.0	4.2	-	
05/23/84	1.6	2.0	1.8	-	2.0	3.8	-	
05/29/84	5.3	2.0	7.6	-	2.0	11.7	-	
05/31/84	1.6	2.0	0.7	-	2.0	1.7	-	
6/1 (am)	2.2	2.0	13.8	-	2.0	19.0	5.9	
6/1 (pm)	2.4	2.0	2.8	-	1.7	-	-	
06/04/84	8.0*	2.0	20.0*	-	2.0	20.0*	-	*Overflowing
06/05/84	7.5	2.0	9.7	-	2.0	4.8	-	
6/7/84**								**High precip. caused heavy run- off which flooded collection shed.
6/8/84**								See note at end of table for est- imated flow rates.
** 6/11 (am)	8.0*	2.0	20.0*	-	2.0	20.0*	-	*Overflowing **See note at end of table.



TABLE 1.2.1.7-2 (Cont'd)

1984 Raw Shale Lysimeter Volumes (Liters)

DATE	10E	15A	15D	15E	20A	20D	20E	COMMENTS
6/11 (pm)	2.8	2.0	2.1	-	2.0	3.2	-	
06/14/84	8.0*	2.0	20.0*	-	2.0	20.0*	-	*Overflowing
06/15/84	5.0	2.0	6.2	-	2.0	10.9	-	
06/18/84	8.0*	2.0	11.5	-	2.0	20.0	-	*Overflowing
06/20/84	5.1	2.0	6.2	-	2.0	12.5	-	
06/22/84	3.4	2.0	3.5	-	2.0	-	-	
06/25/84	5.0	2.0	5.8	-	2.0	12.1	-	
06/29/84	5.0	2.0	5.9	-	2.0	12.0	-	
07/04/84	5.5	2.0	6.4	-	2.0	11.4	-	
07/09/84	4.0	2.0	2.0	-	2.0	7.8	-	
07/17/84	5.0	2.0	8.5	-	2.0	10.5	-	
07/27/84	5.9	2.0	8.1	-	2.0	12.9	-	
08/02/84	3.5	2.0	3.5	-	2.0	16.9	-	
08/09/84	4.3	2.0	1.8	-	2.0	13.6	-	
08/14/84	5.0	2.0	3.7	-	2.0	3.4	-	
08/20/84	8.0*	2.0	20.0*	-	2.0	20.0*	-	*Overflowing
08/21/84	8.0*	2.0	20.0*	-	2.0	20.0*	-	*Overflowing
08/22/84	8.0*	2.0	20.0*	-	2.0	16.4	-	*Overflowing
08/23/84	8.0*	2.0	14.7	-	2.0	10.8	-	*Overflowing
08/24/84	6.3	2.0	9.2	-	2.0	8.4	-	
08/27/84	8.0	2.0	20.0*	-	2.0	20.0	-	*Overflow
08/28/84	3.8	2.0	4.3	-	2.0	7.7	-	
08/31/84	6.8	2.0	10.1	-	2.0	18.2	-	
09/04/84	6.9	2.0	10.3	-	2.0	19.5	-	

TABLE 2.1.7-5 (Cont'd)

1998 New South Wales (NSW) Values (1998)

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	3251	3252	3253	3254	3255	3256	3257	3258	3259	3260	3261	3262	3263	3264	3265	3266	3267	3268	3269	3270	3271	3272	3273	3274	3275	3276	3277	3278	3279	3280	3281	3282	3283	3284	3285	3286	3287	3288	3289	3290	3291	3292	3293	3294	3295	3296	3297	3298	3299	3300	3301	3302	3303	3304	3305	3306	3307	3308	3309	3310	3311	3312	3313	3314	3315	3316	3317	3318	3319	3320	3321	3322	3323	3324	3325	3326	3327	3328	3329	3330	3331	3332	3333	3334	3335	3336	3337	3338	3339	3340	3341	3342	3343	3344	3345	3346	3347	3348	3349	3350	3351	3352	3353	3354	3355	3356	3357</
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TABLE 1.2.1.7-2 (Cont'd)

1984 Raw Shale Lysimeter Volumes (Liters)

DATE	10E	15A	15D	15E	20A	20D	20E	COMMENTS
09/07/84	4.3	2.0	5.9	-	2.0	12.6	-	
09/12/84	5.4	2.0	7.6	-	2.0	12.3	-	
09/17/84	3.9	2.0	5.0	-	2.0	0.3	-	
09/25/84	6.1	2.0	6.9	-	2.0	1.3	-	
09/26/84	1.0	1.2	-	-	1.9	-	-	
10/01/84	3.8	2.0	3.2	-	2.0	5.2	-	
10/05/84	7.2	2.0	6.3	-	2.0	1.2	-	
10/16/84	8.0*	2.0	20.0	-	2.0	20.0	-	*Overflowing
10/17/84	8.0	2.0	9.9	-	2.0	19.0	-	
10/18/84	7.2	2.0	6.0	-	2.0	1.7	-	
10/22/84	8.0*†	2.0	20.0	-	2.0	18.6	-	*Overflowing † Last volume taken
10/24/84	-	2.0	7.6	-	2.0	10.1	-	
10/26/84	-	2.0	6.2	-	2.0	3.7	-	
10/30/84	-	2.0	20.0	-	2.0	17.6	-	*Overflow
11/1/84†	-	2.0	10.8	10.7	2.0	10.0	8.5	Last volume † taken

**NOTE: 06/07/84 Lysimeter shed was found flooded. It was pumped out and ran for 1.5 hours and was then dismantled. The following are lysimeter flows for that time period:

Shale Depth (Feet)	10	15	20
Flow (Liters/Hour)	3.87	4.27	14.0

06/08/84 Lysimeter shed was partially flooded. The shed was pumped out and lysimeter assembled and ran for 2.5 hours. The following are flows for that time period:

Shale Depth (Feet)	10	15	20
Flow (Liters/Hour)	1.07	1.73	2.22

The collection system was reassembled at the end of the day.

TABLE 1.2.1.7-2 (Cont'd)

1984 Raw Shale Lysimeter Volumes (Liters)

**NOTE: 06/11/84 The collection system was found full and overflowing when checked in the morning. At that time an estimate of flow rate was made. Those flow rates were:

Shale Depth (Feet)	10	15	20
Flow (Liters/Hour)	0.40	0.59	0.74

TABLE 1.2.1.7-3

Leachate from 1983 Spent Shale
Revegetation Demonstration Plot - CB Lab
Analysis

DATE	CONDUCTIVITY (mmhos)	TEMP (°C)	pH
05/04/84	24.7	12.0	8.27
05/07/84	25.0	3.0	8.47
05/09/84	29.8	7.0	8.56
05/11/84	30.5	20.0	8.51
05/16/84	31.5	19.0	8.91
05/21/84	34.0	20.3	8.76

SUPPLEMENTAL
WATER DATA

1.2.1.8 Supplemental Water Data - Hydrology

Daily flow readings from Willow and Hunter Creeks for water year 1984 (April - September 1984) are reported in Tables 1.2.1.8-1 and 1.2.1.8-6 respectively.

Water levels data from five Mobil Oil Company monitoring wells are included in this section for June through November 1984. Tabulated data can be referenced in Table 1.2.1.8-7. Time series plots follow this data table for Wells MW01 (Well No. 1), MW02 (Well No. 2), MW03 (Well No. 3), MW12 (Well No. 12), and MW13 (Well No. 13), consecutively; see Figure 1.2.1.8-1. Well locations are shown in Figure 1.2-2.

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DEPARTMENT OF THE HISTORY

OF THE UNITED STATES

AND OF THE
CIVILIZATION OF THE
UNITED STATES
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TABLE 1.2.1.8-1

Discharge In Cubic Feet Per Second			Hunter Creek - Shell Station				Water Year October 1983 to September 1984					
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	3.3	3.1	2.4	2.2	2.1	2.5	2.6	2.2	3.9	5.1	3.9
2	4.1	3.3	3.0	2.3	2.1	2.1	2.5	2.5	2.2	3.9	4.5	3.8
3	4.1	3.3	3.0	2.3	2.2	2.1	2.5	2.3	2.1	3.9	4.5	3.8
4	4.1	3.3	3.0	2.3	2.1	2.1	2.5	2.3	2.5	4.1	4.5	3.8
5	3.9	3.3	2.5	2.3	2.1	2.1	2.6	2.3	2.8	3.9	4.5	3.7
6												
7	3.8	3.3	2.5	2.2	2.1	2.1	2.6	2.5	3.1	3.9	4.4	3.7
8	3.8	3.3	2.5	2.2	2.1	2.1	2.6	2.5	3.6	3.9	4.4	3.6
9	3.8	3.6	2.6	2.2	2.1	2.1	2.6	2.4	3.6	4.1	4.4	3.6
10	3.7	3.4	2.6	2.2	2.1	2.1	2.6	2.6	3.6	4.4	4.4	3.4
	3.7	3.4	2.5	2.2	2.1	2.3	2.8	2.4	2.9	4.2	4.4	3.3
11												
12	3.7	3.3	2.5	2.2	2.2	2.3	2.9	2.5	2.4	4.2	4.3	3.4
13	3.6	3.4	2.5	2.2	2.2	2.3	2.8	2.6	2.5	4.3	4.3	3.4
14	3.7	3.4	2.5	2.2	2.1	2.4	2.9	2.8	2.5	4.3	4.3	3.3
15	3.8	3.3	2.5	2.2	2.1	2.1	2.8	3.0	2.6	4.3	4.3	3.3
	3.8	3.2	2.5	2.2	2.1	2.8	2.8	3.3	3.0	4.3	4.3	3.3
16												
17	3.7	3.2	2.4	2.2	2.1	2.6	2.8	3.8	3.3	4.3	4.3	3.3
18	3.6	3.2	2.5	2.2	2.2	2.6	2.6	4.1	3.2	4.3	4.3	3.3
19	3.6	3.2	2.5	2.2	2.1	2.5	2.6	4.2	3.2	4.3	4.3	3.2
20	3.6	3.2	2.4	2.2	2.1	2.4	2.6	4.2	3.2	4.3	4.2	3.2
			2.4	2.4	2.1	2.6	2.8	4.2	3.2	4.3	4.2	3.3
21												
22	3.6	3.2	2.4	2.2	2.1	3.2	2.9	4.3	3.2	4.3	4.2	3.3
23	3.4	3.1	2.4	2.2	2.1	2.8	2.8	4.4	3.3	4.3	4.2	3.2
24	3.4	3.0	2.4	2.2	2.1	2.5	2.8	4.3	3.4	4.4	4.2	3.1
25	3.4	3.1	2.4	2.2	2.1	2.6	2.8	4.3	3.4	4.4	4.2	2.9
			2.4	2.2	2.1	2.6	2.8	4.4	3.6	4.4	4.2	2.9
26												
27	3.4	3.1	2.4	2.2	2.1	2.5	3.2	4.4	3.6	4.5	4.2	2.9
28	3.4	3.0	2.4	2.2	2.1	2.5	2.9	4.5	3.7	4.5	4.2	2.9
29	3.4	3.0	2.4	2.2	2.2	2.4	2.6	4.5	3.7	4.5	4.2	1.8
30	3.4	3.0	2.3	2.2	2.1	2.4	2.8	4.2	3.8	4.5	4.1	1.7
31	3.4	3.0	2.3	2.2		2.4	2.8	2.8	3.8	4.5	4.1	1.7
								2.2	3.8	4.5	3.9	
Total	113.2	96.7	78.1	69.0	61.4	74.1	81.8	103.4	93.2	131.9	133.6	96.0
Ac-ft	224.5	191.8	154.9	136.9	121.8	147.0	162.3	205.1	184.9	261.6	265.0	190.4

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TABLE 1.2.1.8-2

Stream Hunter Creek - Shell Station

Year 1984

Discharge in Cubic Feet Per Second

April				May			June		
Day	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.
1	2.5	2.5	2.5	2.6	2.6	2.6	2.2	2.3	2.2
2	2.5	2.5	2.5	2.5	2.6	2.4	2.2	2.2	2.1
3	2.5	2.5	2.5	2.3	2.4	2.3	2.1	2.3	2.1
4	2.5	2.5	2.4	2.3	2.3	2.3	2.5	2.8	2.3
5	2.6	2.9	2.4	2.3	2.4	2.3	2.8	3.1	2.5
6	2.6	2.6	2.5	2.5	3.0	2.3	3.1	3.4	2.9
7	2.6	2.6	2.6	2.5	2.5	2.4	3.6	3.7	3.4
8	2.6	2.6	2.5	2.4	2.5	2.3	3.6	3.6	3.6
9	2.6	2.8	2.6	2.6	2.9	2.4	3.6	3.6	3.6
10	2.8	2.9	2.8	2.4	2.6	2.3	2.9	3.6	2.4
11	2.9	2.9	2.9	2.5	2.6	2.3	2.4	2.6	2.3
12	2.8	2.9	2.6	2.6	2.8	2.6	2.5	2.9	2.5
13	2.9	2.9	2.8	2.8	3.0	2.6	2.5	3.0	2.4
14	2.8	2.8	2.8	3.0	3.1	2.9	2.6	3.1	2.5
15	2.8	2.8	2.8	3.3	3.6	3.1	3.0	3.2	2.8
16	2.8	2.8	2.6	3.8	3.9	3.6	3.3	3.3	3.2
17	2.6	2.6	2.6	4.1	4.1	3.9	3.2	3.3	3.2
18	2.6	2.8	2.6	4.2	4.2	4.1	3.2	3.2	3.2
19	2.6	2.8	2.6	4.2	4.2	4.2	3.2	3.2	3.2
20	2.8	2.8	2.8	4.2	4.2	4.2	3.2	3.2	3.2
21	2.9	2.9	2.8	4.3	4.4	4.2	3.2	3.3	3.2
22	2.8	2.9	2.6	4.4	4.4	4.3	3.3	3.4	3.3
23	2.8	2.9	2.8	4.3	4.3	4.3	3.4	3.4	3.4
24	2.8	2.8	2.8	4.3	4.4	4.3	3.4	3.6	3.4
25	2.8	2.9	2.8	4.4	4.4	4.3	3.6	3.6	3.6
26	3.2	4.1	2.8	4.4	4.5	4.4	3.6	3.7	3.6
27	2.9	3.7	2.8	4.5	4.5	4.5	3.7	3.7	3.7
28	2.6	2.9	2.4	4.5	4.5	4.5	3.7	3.7	3.7
29	2.8	3.0	2.5	4.2	4.5	4.1	3.8	3.8	3.7
30	2.8	2.8	2.6	2.8	4.1	1.9	3.8	3.8	3.8
31				2.2	2.3	2.1			
SFD 81.8				103.4			93.2		
Ac. Ft. 162.3				205.1			184.9		
Mean 2.7				3.3			3.1		
Max. 3.2				4.5			3.8		
Min. 2.5				2.2			2.1		

TABLE 1.2.1.8-3

Stream Hunter Creek - Shell Station

Year 1984

Discharge in Cubic Feet Per Second

July				August			September		
Day	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.
1	3.9	3.9	3.8	5.1	9.3	4.5	3.9	3.9	3.9
2	3.9	3.9	3.9	4.5	4.5	4.5	3.8	3.9	3.8
3	3.9	4.1	3.9	4.5	4.5	4.5	3.8	3.8	3.8
4	4.1	4.1	3.9	4.5	4.5	4.5	3.8	3.8	3.8
5	3.9	3.9	3.9	4.5	4.5	4.4	3.7	3.8	3.7
6	3.9	3.9	3.9	4.4	4.4	4.4	3.7	3.7	3.6
7	3.9	3.9	3.9	4.4	4.4	4.4	3.6	3.6	3.6
8	4.1	4.3	3.9	4.4	4.4	4.4	3.6	3.6	3.4
9	4.4	13	4.2	4.4	4.4	4.4	3.4	3.4	3.4
10	4.2	4.2	4.2	4.4	4.4	4.3	3.3	3.4	3.3
11	4.2	4.2	4.2	4.3	4.3	4.3	3.4	3.4	3.4
12	4.3	4.3	4.2	4.3	4.3	4.3	3.4	3.4	3.4
13	4.3	4.3	4.3	4.3	4.3	4.3	3.3	3.4	3.3
14	4.3	4.3	4.3	4.3	4.3	4.3	3.3	3.4	3.3
15	4.3	4.3	4.3	4.3	4.4	4.3	3.3	3.3	3.3
16	4.3	4.3	4.3	4.3	4.3	4.3	3.3	3.3	3.3
17	4.3	4.3	4.3	4.3	4.3	4.3	3.3	3.3	3.2
18	4.3	4.3	4.3	4.3	4.3	4.3	3.2	3.2	3.2
19	4.3	4.3	4.3	4.2	4.3	4.2	3.2	3.2	3.2
20	4.3	4.3	4.3	4.2	4.2	4.2	3.3	3.3	3.2
21	4.3	4.3	4.3	4.2	4.2	4.2	3.3	3.3	3.3
22	4.3	4.4	4.3	4.2	4.2	4.2	3.2	3.3	3.2
23	4.4	4.4	4.3	4.2	4.2	4.2	3.1	3.2	3.0
24	4.4	4.4	4.3	4.2	4.2	4.2	2.9	3.0	2.9
25	4.4	4.5	4.4	4.2	4.2	4.2	2.9	2.9	2.9
26	4.5	4.5	4.5	4.2	4.2	4.2	2.9	3.0	2.9
27	4.5	4.5	4.5	4.2	4.2	4.2	2.9	3.0	2.8
28	4.5	4.5	4.5	4.2	4.2	4.1	1.8	2.8	1.2
29	4.5	4.5	4.5	4.1	4.1	4.1	1.7	1.8	1.6
30	4.5	4.5	4.5	4.1	4.1	4.1	1.7	1.7	1.7
31	4.5	4.5	4.5	3.9	4.1	3.9			
SFD 131.9				133.6			96.0		
Ac. Ft. 261.6				265.0			190.4		
Mean 4.3				4.3			3.2		
Max. 4.5				5.1			3.9		
Min. 3.9				3.9			1.7		

TABLE 1.2.1.8-4

Willow Creek - Shell Station

Water Year October 1983 to September 1984

Discharge In Cubic Feet Per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	3.6	2.9	2.2	3.0	2.6	3.8	5.7	10	11	9.5	5.5
2	4.3	3.6	2.9	2.1	2.6	2.6	3.9	5.8	8.6	11	9.8	4.8
3	4.2	3.6	2.9	2.2	3.0	2.8	3.9	5.8	8.3	11	8.8	4.7
4	4.2	3.6	2.9	2.3	3.7	3.0	4.1	5.7	9.0	11	9.1	4.4
5	4.2	3.6	2.9	2.3	3.4	3.1	4.1	6.0	11	10	8.8	4.2
6	4.2	3.4	2.9	2.4	3.2	3.3	4.1	6.1	12	9.8	8.8	3.8
7	4.1	3.4	2.9	2.8	3.2	3.3	3.9	6.3	9.8	10	8.5	3.8
8	4.1	3.6	2.9	2.9	3.3	3.3	3.8	6.1	9.1	10	8.0	4.2
9	4.1	3.4	2.9	3.0	2.8	3.4	3.6	6.3	8.8	11	7.7	4.3
10	4.1	3.4	2.9	2.8	3.1	3.4	3.1	6.6	8.3	11	7.5	4.4
11	4.1	3.4	2.9	2.8	3.0	3.4	3.4	7.2	8.5	10	7.3	4.4
12	4.1	3.4	2.8	2.8	3.0	3.4	3.1	7.8	8.5	9.3	6.9	4.3
13	4.1	3.3	2.6	2.9	3.0	3.4	3.3	8.6	8.5	9.1	6.4	4.2
14	4.2	3.4	2.8	3.0	3.0	3.6	3.1	9.3	8.6	9.5	6.1	4.2
15	4.1	3.4	2.8	3.0	2.6	3.6	3.2	9.8	8.6	9.0	6.0	4.1
16	4.1	3.4	2.6	3.0	2.8	3.6	3.2	10	9.0	8.1	5.5	4.4
17	3.9	2.4	2.8	3.0	2.8	3.6	3.3	10	9.1	7.8	3.8	3.9
18	3.9	3.4	2.8	3.0	2.4	3.6	3.9	9.8	9.1	7.2	3.7	3.9
19	3.9	3.4	2.9	3.2	2.1	3.6	4.7	10	9.1	7.8	4.1	4.3
20	3.9	3.4	2.8	3.6	2.3	3.7	4.9	11	9.3	8.3	5.1	4.4
21	3.9	3.3	2.2	4.2	2.1	3.7	4.5	11	9.8	9.3	4.5	4.4
22	3.8	3.3	1.9	3.9	2.5	3.7	4.5	11	9.8	8.8	4.5	4.4
23	3.8	3.2	1.9	3.6	2.1	3.7	4.5	11	9.3	8.1	4.4	4.2
24	3.8	3.2	1.9	3.4	2.1	3.7	4.5	11	9.3	9.1	4.8	4.4
25	3.7	3.2	1.7	2.9	2.4	3.7	5.4	11	10	9.1	5.1	4.2
26	3.7	3.2	1.8	2.2	1.9	3.7	5.5	11	10	8.8	5.3	4.2
27	3.7	3.1	2.0	2.2	2.4	3.7	5.3	10	11	8.8	5.4	4.1
28	3.7	3.0	2.1	2.9	2.5	3.7	5.1	9.3	11	8.1	5.4	3.7
29	3.7	2.9	1.9	2.9	2.6	3.8	5.7	9.5	11	7.7	5.3	3.6
30	3.7	2.9	1.9	2.6		3.8	5.7	9.7	12	8.8	5.4	3.6
31	3.7		1.9	2.8		3.8	10			9.3	5.5	
Total	123.1	100.4	78.0	88.9	78.9	107.3	125.1	268.4	286.4	287.8	197.0	127.0
Ac-ft	244.2	199.1	154.7	176.3	156.5	212.8	248.1	532.4	568.1	570.9	390.8	251.9

1934 年 1 月 1 日 至 1934 年 12 月 31 日

日期	姓名	性别	年龄	籍贯	职业	住址	备注
1934.1.1	张三	男	25	山东	农民	山东烟台	
1934.1.1	李四	女	20	河北	工人	河北保定	
1934.1.1	王五	男	30	江苏	商人	江苏苏州	
1934.1.1	赵六	男	28	浙江	教师	浙江杭州	
1934.1.1	孙七	男	22	广东	学生	广东广州	
1934.1.1	周八	女	18	湖南	护士	湖南长沙	
1934.1.1	吴九	男	35	四川	医生	四川成都	
1934.1.1	郑十	男	27	湖北	记者	湖北武汉	
1934.1.1	冯十一	女	24	山西	会计	山西太原	
1934.1.1	陈十二	男	32	陕西	工程师	陕西西安	
1934.1.1	林十三	男	29	河南	农民	河南郑州	
1934.1.1	黄十四	女	21	安徽	工人	安徽合肥	
1934.1.1	周十五	男	26	江西	商人	江西九江	
1934.1.1	吴十六	男	31	福建	教师	福建福州	
1934.1.1	郑十七	女	19	广西	学生	广西桂林	
1934.1.1	冯十八	男	23	云南	工人	云南昆明	
1934.1.1	陈十九	男	28	贵州	商人	贵州贵阳	
1934.1.1	林二十	女	25	四川	教师	四川重庆	
1934.1.1	黄二十一	男	30	湖南	医生	湖南衡阳	
1934.1.1	周二十二	男	27	湖北	记者	湖北宜昌	
1934.1.1	吴二十三	女	24	山西	会计	山西大同	
1934.1.1	郑二十四	男	33	陕西	工程师	陕西宝鸡	
1934.1.1	林二十五	男	30	河南	农民	河南新乡	
1934.1.1	黄二十六	女	22	安徽	工人	安徽蚌埠	
1934.1.1	周二十七	男	27	江西	商人	江西赣州	
1934.1.1	吴二十八	男	32	福建	教师	福建厦门	
1934.1.1	郑二十九	女	20	广西	学生	广西柳州	
1934.1.1	冯三十	男	25	云南	工人	云南曲靖	
1934.1.1	陈三十一	男	30	贵州	商人	贵州安顺	
1934.1.1	林三十二	女	26	四川	教师	四川南充	
1934.1.1	黄三十三	男	31	湖南	医生	湖南邵阳	
1934.1.1	周三十四	男	28	湖北	记者	湖北黄冈	
1934.1.1	吴三十五	女	25	山西	会计	山西运城	
1934.1.1	郑三十六	男	34	陕西	工程师	陕西咸阳	
1934.1.1	林三十七	男	31	河南	农民	河南开封	
1934.1.1	黄三十八	女	23	安徽	工人	安徽芜湖	
1934.1.1	周三十九	男	28	江西	商人	江西景德镇	
1934.1.1	吴四十	男	33	福建	教师	福建泉州	
1934.1.1	郑四十一	女	21	广西	学生	广西梧州	
1934.1.1	冯四十二	男	26	云南	工人	云南玉溪	
1934.1.1	陈四十三	男	31	贵州	商人	贵州遵义	
1934.1.1	林四十四	女	27	四川	教师	四川达州	
1934.1.1	黄四十五	男	32	湖南	医生	湖南常德	
1934.1.1	周四十六	男	29	湖北	记者	湖北孝感	
1934.1.1	吴四十七	女	26	山西	会计	山西临汾	
1934.1.1	郑四十八	男	35	陕西	工程师	陕西渭南	
1934.1.1	林四十九	男	32	河南	农民	河南商丘	
1934.1.1	黄五十	女	24	安徽	工人	安徽安庆	
1934.1.1	周五十一	男	29	江西	商人	江西上饶	
1934.1.1	吴五十二	男	34	福建	教师	福建漳州	
1934.1.1	郑五十三	女	22	广西	学生	广西百色	
1934.1.1	冯五十四	男	27	云南	工人	云南红河	
1934.1.1	陈五十五	男	32	贵州	商人	贵州毕节	
1934.1.1	林五十六	女	28	四川	教师	四川广安	
1934.1.1	黄五十七	男	33	湖南	医生	湖南益阳	
1934.1.1	周五十八	男	30	湖北	记者	湖北鄂州	
1934.1.1	吴五十九	女	27	山西	会计	山西忻州	
1934.1.1	郑六十	男	36	陕西	工程师	陕西汉中	
1934.1.1	林六十一	男	33	河南	农民	河南周口	
1934.1.1	黄六十二	女	25	安徽	工人	安徽六安	
1934.1.1	周六十三	男	30	江西	商人	江西鹰潭	
1934.1.1	吴六十四	男	35	福建	教师	福建龙岩	
1934.1.1	郑六十五	女	23	广西	学生	广西河池	
1934.1.1	冯六十六	男	28	云南	工人	云南普洱	
1934.1.1	陈六十七	男	33	贵州	商人	贵州铜仁	
1934.1.1	林六十八	女	29	四川	教师	四川遂宁	
1934.1.1	黄六十九	男	34	湖南	医生	湖南郴州	
1934.1.1	周七十	男	31	湖北	记者	湖北随州	
1934.1.1	吴七十一	女	28	山西	会计	山西晋中	
1934.1.1	郑七十二	男	37	陕西	工程师	陕西铜川	
1934.1.1	林七十三	男	34	河南	农民	河南驻马店	
1934.1.1	黄七十四	女	26	安徽	工人	安徽滁州	
1934.1.1	周七十五	男	31	江西	商人	江西抚州	
1934.1.1	吴七十六	男	36	福建	教师	福建宁德	
1934.1.1	郑七十七	女	24	广西	学生	广西崇左	
1934.1.1	冯七十八	男	29	云南	工人	云南文山	
1934.1.1	陈七十九	男	34	贵州	商人	贵州黔东南	
1934.1.1	林八十	女	30	四川	教师	四川内江	
1934.1.1	黄八十一	男	35	湖南	医生	湖南怀化	
1934.1.1	周八十二	男	32	湖北	记者	湖北恩施	
1934.1.1	吴八十三	女	29	山西	会计	山西吕梁	
1934.1.1	郑八十四	男	38	陕西	工程师	陕西安康	
1934.1.1	林八十五	男	35	河南	农民	河南信阳	
1934.1.1	黄八十六	女	27	安徽	工人	安徽宣城	
1934.1.1	周八十七	男	32	江西	商人	江西宜春	
1934.1.1	吴八十八	男	37	福建	教师	福建莆田	
1934.1.1	郑八十九	女	25	广西	学生	广西防城港	
1934.1.1	冯九十	男	30	云南	工人	云南西双版纳	
1934.1.1	陈九十一	男	35	贵州	商人	贵州黔南	
1934.1.1	林九十二	女	31	四川	教师	四川眉山	
1934.1.1	黄九十三	男	36	湖南	医生	湖南娄底	
1934.1.1	周九十四	男	33	湖北	记者	湖北仙桃	
1934.1.1	吴九十五	女	30	山西	会计	山西朔州	
1934.1.1	郑九十六	男	39	陕西	工程师	陕西商洛	
1934.1.1	林九十七	男	36	河南	农民	河南漯河	
1934.1.1	黄九十八	女	28	安徽	工人	安徽池州	
1934.1.1	周九十九	男	33	江西	商人	江西吉安	
1934.1.1	吴一百	男	38	福建	教师	福建南平	

1934 年 1 月 1 日 至 1934 年 12 月 31 日

1934 年 1 月 1 日 至 1934 年 12 月 31 日

TABLE 1.2.1.8-5

Stream Willow Creek - Shell StationYear 1984

Discharge in Cubic Feet Per Second

April				May			June		
Day	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.
1	3.8			5.7	6.0	5.4	10	11	9.7
2	3.9			5.8	6.1	5.5	8.6	9.5	8.3
3	3.9			5.8	6.0	5.7	8.3	8.5	8.3
4	4.1			5.7	6.0	5.4	9.0	9.7	8.3
5	4.1			6.0	6.1	5.7	11	13	9.0
6	4.1			6.1	6.3	6.1	12	13	11
7	3.9	4.1	3.8	6.3	6.4	6.1	9.8	10	9.7
8	3.8	3.9	3.7	6.1	6.3	6.0	9.1	9.5	8.3
9	3.6	3.7	3.3	6.3	6.4	6.1	8.8	9.5	8.3
10	3.1	3.4	2.8	6.6	6.9	6.3	8.3	8.5	8.3
11	3.4	3.4	3.3	7.2	7.5	6.9	8.5	8.5	8.5
12	3.1	3.3	2.5	7.8	8.1	7.5	8.5	8.6	8.5
13	3.3	3.3	3.2	8.6	9.0	8.1	8.5	8.6	8.3
14	3.1	3.2	3.0	9.3	9.7	9.0	8.6	8.6	8.6
15	3.2	3.2	3.1	9.8	9.8	9.7	8.6	8.8	8.5
16	3.2	3.3	4.4	10	10	9.7	9.0	9.1	8.8
17	3.3	3.4	3.3	10	11	9.8	9.1	9.1	9.1
18	3.9	4.4	3.4	9.8	10	9.7	9.1	9.1	9.1
19	4.7	4.9	4.4	10	10	10	9.1	9.1	9.1
20	4.9	5.3	4.7	11	11	10	9.3	9.7	8.8
21	4.5	4.7	4.4	11	11	11	9.8	10	9.0
22	4.5	4.7	4.5	11	11	11	9.8	11	8.5
23	4.5	4.7	4.4	11	11	11	9.3	10	8.8
24	4.5	4.7	4.4	11	11	11	9.3	10	8.3
25	5.4	5.7	4.7	11	12	11	10	11	9.1
26	5.5	5.8	5.1	11	11	11	10	11	9.8
27	5.3	6.0	3.4	10	11	9.1	11	11	10
28	5.1	6.0	3.6	9.3	10	8.8	11	11	11
29	5.7	6.0	5.4	9.5	11	8.6	11	11	11
30	5.7	6.0	5.5	9.7	11	8.5	12	15	11
31				10	11	9.0			
SFD 125.1				268.4			286.4		
Ac. Ft. 248.1				532.4			568.1		
Mean 4.17				8.66			9.55		
Max. 5.7				11			12		
Min. 3.1				5.7			8.3		

Note: No max. and min. from April 1 to April 6, 1984
due to poor quality record. I- 230

TABLE 1.2.1.8-6

Stream Willow Creek - Shell Station

Year 1984

Discharge in Cubic Feet Per Second

July				August			September		
Day	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.
1	11	12	11	9.5	10	9.1	5.5	6.0	5.1
2	11	11	10	9.8	10	9.5	4.8	5.3	4.5
3	11	11	9.8	8.8	9.0	8.6	4.7	4.7	4.5
4	11	11	10	9.1	9.7	8.6	4.4	4.5	4.2
5	10	11	10	8.8	9.0	8.6	4.2	4.4	3.8
6	9.8	10	9.7	8.8	9.1	8.6	3.8	3.8	3.8
7	10	11	9.7	8.5	8.8	7.8	3.8	3.8	3.8
8	10	11	10	8.0	8.1	7.7	4.2	4.4	3.8
9	11	11	10	7.7	8.0	7.3	4.3	4.4	4.1
10	11	13	10	7.5	7.7	7.3	4.4	4.4	4.4
11	10	11	9.7	7.3	7.5	7.2	4.4	4.5	4.4
12	9.3	9.8	9.1	6.9	7.5	6.1	4.3	4.4	4.2
13	9.1	9.7	8.8	6.4	7.2	6.1	4.2	4.3	4.1
14	9.5	9.8	9.1	6.1	6.1	6.0	4.2	4.3	4.1
15	9.0	9.7	8.5	6.0	6.0	5.8	4.1	4.3	3.7
16	8.1	8.6	7.7	5.5	6.1	4.3	4.4	4.7	4.2
17	7.8	8.1	7.5	3.8	4.3	3.6	3.9	4.2	3.7
18	7.2	7.7	7.0	3.7	3.7	3.7	3.9	4.2	3.8
19	7.8	8.0	7.7	4.1	6.6	3.6	4.3	4.9	3.8
20	8.3	10	7.2	5.1	9.1	4.2	4.4	4.5	4.3
21	9.3	9.8	8.8	4.5	5.3	4.4	4.4	4.7	4.2
22	8.8	9.0	8.6	4.5	4.7	4.3	4.4	4.7	4.2
23	8.1	9.7	7.3	4.4	4.5	4.3	4.2	4.3	4.2
24	9.1	9.8	8.6	4.8	4.9	4.5	4.4	4.3	4.2
25	9.1	10	8.6	5.1	5.1	4.9	4.2	4.3	4.2
26	8.8	9.1	8.6	5.3	5.5	5.1	4.2	4.3	4.2
27	8.8	9.1	8.6	5.4	5.5	5.3	4.1	4.3	3.7
28	8.1	8.8	7.7	5.4	5.5	4.9	3.7	3.8	3.6
29	7.7	8.0	7.0	5.3	5.5	4.7	3.6	3.7	3.6
30	8.8	11	7.2	5.4	5.5	5.3	3.6	3.7	3.6
31	9.3	10	9.1	5.5	5.5	5.4			
SFD 287.8				197.0			127.0		
Ac. Ft. 570.9				390.8			251.9		
Mean 9.3				6.4			4.2		
Max. 11				9.8			5.5		
Min. 7.2				3.7			3.6		

TABLE 1.2.1.8-7

CB-TRACT
MORIL WELL LEVELS

			WELL ID - FT FROM GROUND LEVEL				
			MW01	MW02	MW03	MW12	MW13
YR	MO	DAY	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
94	6	6				6302.0977	6299.8672
	7	11	6300.8242	6147.7969	6250.2969	6302.1953	6300.0156
	8	21				6302.3945	
		22	6300.6797	6147.3945	6250.6953		6299.5000
	9	11	6300.8086	6147.1992	6250.5000	6303.6992	6301.7500
10	10		6301.1797	6146.7969	6250.3984		
		11				6304.7969	6302.2500
11	7		6301.3086	6147.0000	6250.5977		
		8				6305.0000	

MOBIL WELL LEVELS

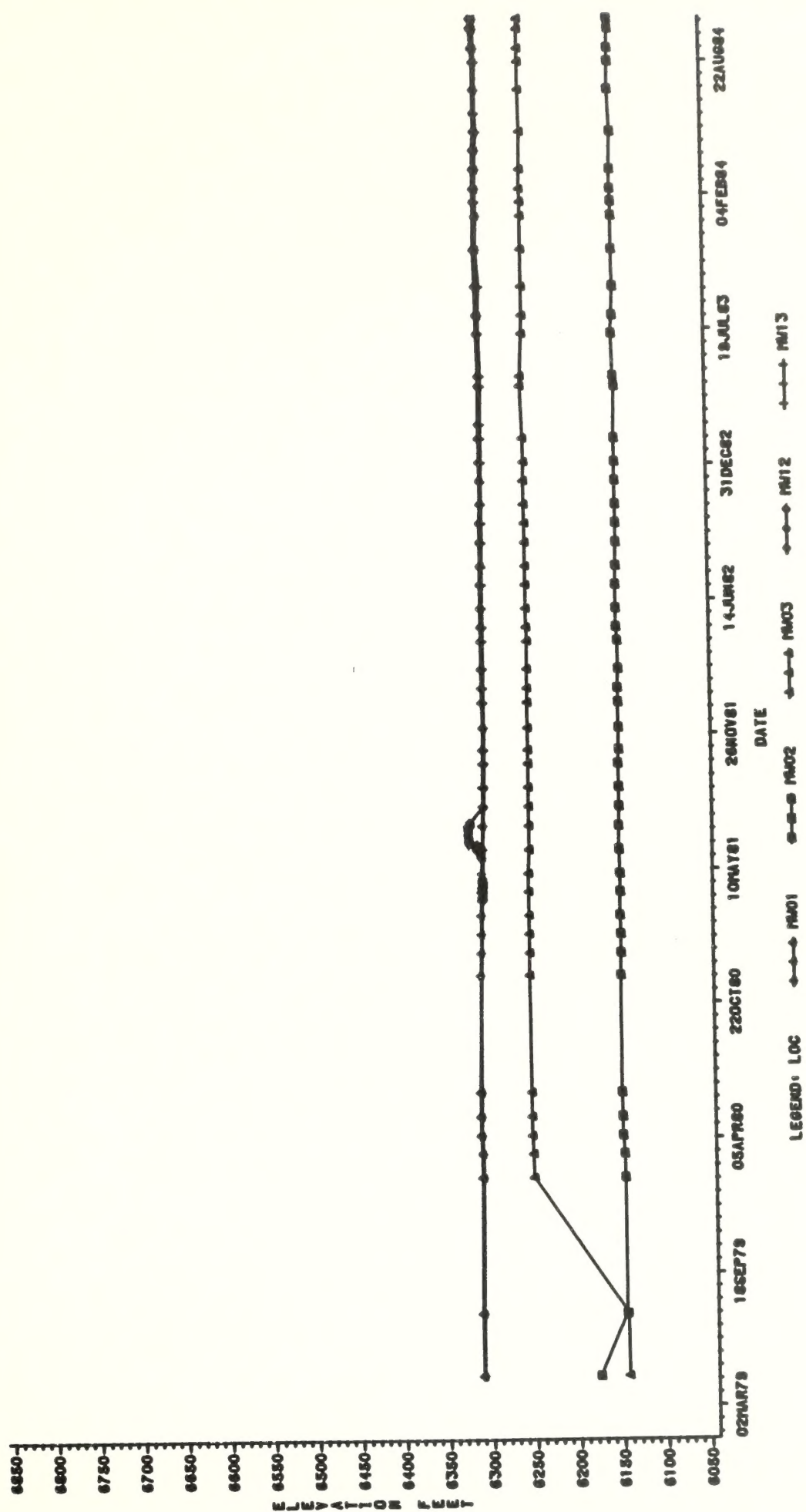


FIGURE 1.2.1.8-1

WATER QUALITY

1.2.2 Water Quality

Water samples taken at USGS surface streams, springs and seeps, alluvial and bedrock wells, seepage wells, discharge points, shafts and shale dumps were analyzed for various variables depending on the monitoring and reporting requirements of these water stations. Data tables are presented in these subsections for water samples taken in June through November 1984

Table 1.2-1 contains water monitoring requirements by station designation including sampling frequencies of levels and flows and water quality. Within each subsection the required frequency is explained and parameters listed for analyses during the Interim Monitoring Program (IMP). Table 1.2-2 lists an index of deep wells sampled in and around the C-b Tract with associated page numbers locating levels data, time series, plots of levels, and water quality for each well by aquifer or zone and location.

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CONTENTS
The Journal of the American Society of Plant Physiologists is published quarterly. The Journal is devoted to the publication of original research papers, reviews, and short communications. The Journal is published by the American Society of Plant Physiologists, 11 Dupont Circle, N.W., Washington, D.C. 20036. The Journal is published by the American Society of Plant Physiologists, 11 Dupont Circle, N.W., Washington, D.C. 20036.

**SURFACE
STREAMS**

1.2.2.1 Surface Streams

Water samples were collected from eight USGS stream gaging stations along Piceance Creek. Refer to Figure 1.2.1.1-1 in Surface Streams subsection of the Levels and Flows Section 1.2.1 for station locations. Field data reported in this section are for 1984 water year. Lab analyses for water samples of 1984 water year (October 1983 - September 1984) are included in this section. Table 1.2.2.1-1 describes parameters sampled with corresponding page number of data tables for 12 gaging stations. Only eight of these are required during the Interim Monitoring Program: 007, 022, 036, 039, 042, 052, 058 and 061.

Remark codes used in the data tables are defined in Table 1.2.2.1-2.



TABLE 1.2.2.1-1
USGS GAGING STATION SURFACE WATER DATA

Stations	Daily Discharge (Flow)	Daily Mean Sediment & Discharge Data	Daily Dissolved Oxygen	Daily pH Readings	Daily Specific Conductance	Daily Temperature	Water Quality Data
09304800 (WU48)	NO DATA			I-238	I-238	I-238	I-235
09306007* (WU07)	I-19	I-16		I-243	I-243	I-243	I-240, I-299
09306022 (WU22)	I-20			I-248	I-248	I-248	I-245
09306036 (WU36)	I-21						
09306039 (WU39)	I-22						
09306042* (WU42)	I-26	I-23		I-253	I-253	I-253	I-250, I-299
09306058 (WU58)	I-27			I-258	I-258	I-258	I-255
09306061* (WU61)	I-31	I-28		I-263	I-263	I-263	I-260, I-299
09306200 (WU00)	I-32			NO DATA	NO DATA	I-268	I-265
09306222 (WU62)				I-273	I-273	I-273	I-270
09306045 (WU45)**							

* Major Station

Data were not available in WATSTOR data base for gaging stations showing blanks in parameter columns.

** Starting in water year 1985

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WATER QUALITY DATA

DATE	ALKALINITY FIELD (MG/L AS CAC03) (00410)	ALUMINUM, DIS- SOLVED (UG/L AS AL) (01106)	NITROGEN, AMMONIA		ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CARBONATE FET-FLD (MG/L AS CO3) (00445)
			DIS- SOLVED (MG/L AS N) (00608)	DIS- SOLVED (MG/L AS AL) (01106)									
DEC , 1983	--	--	.020	--	--	--	--	--	20	--	--	67	--
07...	--	--											
JUL , 1984	--	--	.040	--	--	--	--	--	20	--	--	55	--
20...	--	--											
SEP	--	--	.030	<1	<1	35	--	--	30	--	<1	60	--
10...	--	--											

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DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
DEC 9 1983	--	8.9	--	--	--	--	--	--	.10	--	--
JUL 9 1984	--	7.0	--	--	--	--	--	--	.20	--	--
SEP 10...	--	7.3	<10	--	--	<1	--	--	.20	14	<1

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WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
DEC , 1983	--	18	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JUL , 1984	--	17	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
SEP	--	20	14	<.1	--	<1	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--

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WATER QUALITY DATA

DATE	CARRON, TOTAL (MG/L AS C) (00490)	PHOS- PHATE, ORTH0, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
DEC , 1983	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JUL , 1984	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
SEP	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--

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09304800 - WHITE RIVER BELOW MEEKER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SR) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
DEC , 1983											
07...	1.2	--	15	17	--	640	120	--	--	--	--
JUL , 1984											
20...	1.5	--	15	13	--	480	95	--	--	--	--
SEP											
10...	1.7	3	15	16	--	600	120	--	5	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09304800 - WHITE RIVER BELOW MEEKER, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCR, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
DEC , 1983	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JUL , 1984	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
SEP	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306007 - PICEANCE CREEK BELOW RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY (MG/L AS CAC03) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00604)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1983												
09...	--	<10	.060	2	110	--	--	180	<.010	<1	72	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
APR , 1984												
06...	--	--	.080	2	--	--	--	150	--	--	78	--
MAY												
24...	--	20	.030	2	110	--	--	80	.160	<1	70	--
JUN												
20...	--	--	.040	2	--	--	--	110	--	--	78	--
JUL												
25...	--	--	.100	3	--	--	--	140	--	--	75	--
SEP												
12...	--	--	.040	2	--	--	--	170	--	--	73	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306007 - PICEANCE CREEK BELOW RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
NOV , 1983											
09...	27	17	<10	--	--	4	--	--	.80	6	2
09...	--	--	--	--	100	--	--	--	--	--	--
APR , 1984											
06...	--	18	--	--	--	--	--	--	.70	10	--
MAY											
24...	74	15	<10	--	K930	5	--	--	.40	7	<1
JUN											
20...	--	13	--	--	--	--	--	--	.80	7	--
JUL											
25...	--	15	--	--	--	--	--	--	.60	20	--
SEP											
12...	--	15	--	--	--	--	--	--	.80	5	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306007 - PICEANCE CREEK BELOW RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L) AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (39260)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L) AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L) AS C) (00691)
NOV , 1983											
09...	24	45	42	<.1	--	6	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
APR , 1984											
06...	--	45	29	--	--	--	--	--	--	--	--
MAY											
24...	26	36	12	<.1	--	8	--	--	--	--	--
JUN											
20...	--	45	13	--	--	--	--	--	--	--	--
JUL											
25...	--	45	17	--	--	--	--	--	--	--	--
SEP											
12...	--	48	21	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306007 - PICCANCE CREEK BELOW RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON TOTAL (MG/L) AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1983											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
APR , 1984											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
JUL											
25...	--	--	--	--	--	--	--	--	--	--	--
SEP											
12...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306007 - PICEANCE CREEK BELOW RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, EPOXIDE TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCA, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1983											
09....	--	--	--	--	--	--	--	--	--	--	8
09....	--	--	--	--	--	--	--	--	--	--	--
APR , 1984											
06....	--	--	--	--	--	--	--	--	--	--	<1
MAY											
24....	--	--	--	--	--	--	--	--	--	--	<1
JUN											
20....	--	--	--	--	--	--	--	--	--	--	<1
JUL											
25....	--	--	--	--	--	--	--	--	--	--	1
SEP											
12....	--	--	--	--	--	--	--	--	--	--	1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306007 - PICEANCE CREEK BELOW RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1983										
09...	2.5	2	14	110	--	200	--	4	1.2	<10
09...	--	--	--	--	--	--	--	--	--	--
APR , 1984										
06...	2.6	--	13	120	--	220	--	--	--	--
MAY										
24...	2.7	5	14	68	--	180	--	6	--	<7.8
JUN										
20...	2.1	--	15	85	--	210	--	--	--	--
JUL										
25...	3.7	--	14	100	--	220	--	--	--	--
SEP										
12...	2.3	--	15	100	--	220	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306022 - STEWART GULCH AR WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY (MG/L AS CACO3) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1983	--	10	.050	1	51	--	--	80	<.010	<1	86	--
10... APR , 1984	--	--	.050	<1	--	--	--	80	--	--	91	--
06... MAY	--	<10	.040	<1	49	--	--	80	.020	<1	86	--
23... JUN	--	--	.030	2	--	--	--	80	--	--	90	--
21... JUL	--	--	.020	1	--	--	--	80	--	--	84	--
25...	--	--										

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
NOV , 1983											
10...	12	7.1	<10	--	--	1	--	--	.30	6	<1
APR , 1984											
06...	--	7.3	--	--	--	--	--	--	.20	8	--
MAY											
23...	13	7.4	<10	--	--	3	--	--	.20	5	<1
JUN											
21...	--	8.6	--	--	--	--	--	--	.30	5	--
JUL											
25...	--	7.7	--	--	--	--	--	--	.30	5	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09306022 - STEWART GULCH AB WEST FORK NR RIO PLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L) AS LI (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3 (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS NO2 (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L) AS C (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L) AS C (00691)
NOV , 1983											
10...	30	73	2	<.1	--	<2	--	--	--	--	--
APR , 1984											
06...	--	70	13	--	--	--	--	--	--	--	--
MAY											
23...	21	68	12	<.1	--	3	--	--	--	--	--
JUN											
21...	--	73	7	--	--	--	--	--	--	--	--
JUL											
25...	--	72	13	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1983	--	--	--	--	--	--	--	--	--	--	--
10...											
APR , 1984	--	--	--	--	--	--	--	--	--	--	--
06...											
MAY	--	--	--	--	--	--	--	--	--	--	--
23...											
JUN	--	--	--	--	--	--	--	--	--	--	--
21...											
JUL	--	--	--	--	--	--	--	--	--	--	--
25...											

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1983	--	--	--	--	--	--	--	--	--	--	4
10...	--	--	--	--	--	--	--	--	--	--	<1
APR , 1984	--	--	--	--	--	--	--	--	--	--	<1
06...	--	--	--	--	--	--	--	--	--	--	<1
MAY	--	--	--	--	--	--	--	--	--	--	<1
23...	--	--	--	--	--	--	--	--	--	--	<1
JUN	--	--	--	--	--	--	--	--	--	--	1
21...	--	--	--	--	--	--	--	--	--	--	
JUL	--	--	--	--	--	--	--	--	--	--	
25...	--	--	--	--	--	--	--	--	--	--	

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1983											
10...	1.4	1	14	120	--	2700	340	--	4	--	<12
APR , 1984											
06...	1.2	--	14	120	--	2700	350	--	--	--	--
MAY											
23...	1.2	<1	15	120	--	2600	360	--	19	--	<11
JUN											
21...	1.1	--	15	130	--	2800	370	--	--	--	--
JUL											
25...	1.7	--	15	130	--	--	340	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY FIELD (MG/L AS CAC03) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- RONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS C03) (00445)
MAY, 1984	--	30	.190	2	110	--	--	40	<.010	<1	33	--
31...												

WATER QUALITY DATA

OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
MAY , 1984	410	10	--	--	7	--	--	.20	52	<1
31...	9.2									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

LITHIUM DIS- SOLVED (UG/L AS LI) DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
--	---	---	---	---	--	--	--	---	--	---

MAY, 1984
 31...

10 7.7 240 <.1 -- 3 -- -- --

WATER QUALITY DATA

PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS P04 (00660)	CARBON, TOTAL (MG/L) AS C) (00690)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
---	---	---	---	---	---	---	---	---	---	---
MAY, 1984										
31...										

WATER QUALITY DATA

	HEPTA- CHLOR. TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCH, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
DATE											
MAY, 1984	--	--	--	--	--	--	--	--	--	--	11
31...											

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
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MAY , 1984
 31... 2.0 <1 6.8 38 -- 550 96 -- 9 -- 8.9

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKALINITY FIELD (MG/L AS CACO3) (00410)	ALUMINUM, DIS- SOLVED (UG/L AS AL) (01106)	NITROGEN, AMMONIA DIS- SOLVED (MG/L AS N) (0060H)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEMICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CARBONATE FET-FLD (MG/L AS CO3) (00445)
MAY 31, 1984	--	70	.150	2	100	--	--	30	<.010	<1	30	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOC CI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
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MAY, 1984

31...

730

7.1

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37

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.20

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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM		MAGNE- SIUM,		MANGA- NESE,		MERCURY		METHY- LENE		MOLYB- DENUM,		NITRO- GEN,		NITRO- GEN,		NITRO- GEN,		OIL AND GREASE		CARBON, INORG + ORGANIC		CARBON, INOR- GANIC,	
	DIS- SOLVED (UG/L)	AS LI (01130)	DIS- SOLVED (MG/L)	AS MG (00925)	DIS- SOLVED (UG/L)	AS MN (01056)	DIS- SOLVED (UG/L)	AS HG (71890)	ACTIVE SUB- STANCE (MG/L)	BLUE SUB- STANCE (MG/L)	DIS- SOLVED (UG/L)	AS MO (01060)	DIS- SOLVED (MG/L)	AS NO2 (71856)	DIS- SOLVED (MG/L)	AS NO3 (71851)	DIS- SOLVED (MG/L)	AS NO2 (71856)	AS NO3 (71851)	AS NO2 (71856)	AS C) (00682)	AS C) (00682)	AS C) (00691)	AS C) (00691)

MAY 1984
31...

9 9.9 9

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARRON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)

MAY, 1984

31...

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DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
- COTTONWOOD GULCH NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

[illegible]

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
--	--	--	---	---	---	--	--	---	--	--

MAY, 1984
31...

1.9 <1 8.0 28 -- 600 60 -- 6 -- 5.9

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY FIELD (MG/L AS CAC03) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS C03) (00445)
NOV , 1983	--	80	.060	2	500	--	--	700	.010	<1	14	--
09....	--	--	.040	1	--	--	--	710	--	--	8.9	--
APR , 1984	--	--	.040	1	--	--	--	700	--	--	8.9	--
06....	--	30	<.010	<1	600	--	--	700	<.010	2	10	--
MAY	--	--	.020	<1	--	--	--	710	--	--	9.0	--
25....	--	--	.030	1	--	--	--	670	--	--	8.8	--
JUN	--	--	.030	1	--	--	--	670	--	--	8.8	--
20....	--	--	.030	1	--	--	--	670	--	--	8.8	--
JUL	--	--	.030	1	--	--	--	670	--	--	8.8	--
25....	--	--	.030	1	--	--	--	670	--	--	8.8	--

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
NOV , 1983											
09....	29	8.2	<10	--	K16	6	--	--	19	100	<1
APR , 1984											
06....	--	8.7	--	--	--	--	--	--	19	60	--
MAY											
25....	26	11	<10	--	400	1	--	--	20	<10	4
JUN											
20....	--	9.2	--	--	--	--	--	--	23	20	--
JUL											
25....	--	7.8	--	--	--	--	--	--	18	30	--

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L) AS LI (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3 (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS NO2 (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L) AS C (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L) AS C (00691)
NOV , 1983											
09...	40	8.6	<10	<.1	--	<4	--	--	--	--	--
APR , 1984											
06...	--	6.7	<10	--	--	--	--	--	--	--	--
MAY											
25...	40	7.4	<10	<.1	--	4	--	--	--	--	--
JUN											
20...	--	6.9	<10	--	--	--	--	--	--	--	--
JUL											
25...	--	6.8	<10	--	--	--	--	--	--	--	--

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1983											
09...	--	--	--	--	--	--	--	--	--	--	--
APR , 1984											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
25...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
JUL											
25...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1983	--	--	--	--	--	--	--	--	--	--	5
09...	--	--	--	--	--	--	--	--	--	--	<1
APR , 1984	--	--	--	--	--	--	--	--	--	--	<1
06...	--	--	--	--	--	--	--	--	--	--	<1
MAY	--	--	--	--	--	--	--	--	--	--	<1
25...	--	--	--	--	--	--	--	--	--	--	<1
JUN	--	--	--	--	--	--	--	--	--	--	<1
20...	--	--	--	--	--	--	--	--	--	--	<1
JUL	--	--	--	--	--	--	--	--	--	--	<1
25...	--	--	--	--	--	--	--	--	--	--	<1

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1983											
09...	2.0	<1	13	500	--	1300	38	--	10	7.5	<22
APR , 1984											
06...	1.5	--	11	560	--	1100	27	--	--	--	--
MAY											
25...	1.6	<1	10	520	--	1400	27	--	<10	--	<20
JUN											
20...	1.6	--	11	600	--	950	32	--	--	--	--
JUL											
25...	1.7	--	12	520	--	970	25	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY (MG/L AS CAC03) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS C03) (00445)
NOV , 1983	--	10	.050	<1	64	--	--	110	<.010	<1	91	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
MAR , 1984	--	--	<.010	<1	--	--	--	130	--	--	86	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
MAY	--	<10	.120	<1	91	--	--	100	.021	<1	88	--
23...	--	--	.040	<1	--	--	--	130	--	--	91	--
JUN	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	.040	1	--	--	--	120	--	--	88	--
JUL	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	.030	<1	--	--	--	150	--	--	87	--
SEP	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
NOV , 1983											
10...	13	13	<10	--	--	1	--	--	.30	8	<1
MAR , 1984											
27...	--	14	--	--	--	--	--	--	.40	8	--
MAY											
23...	20	13	<10	--	--	1	--	--	.30	<3	<1
JUN											
20...	--	12	--	--	--	--	--	--	.50	13	--
JUL											
25...	--	11	--	--	--	--	--	--	.40	6	--
SEP											
12...	--	12	--	--	--	--	--	--	.60	9	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
NOV , 1983											
10...	28	68	11	<.1	--	<2	--	--	--	--	--
MAR , 1984											
27...	--	61	18	--	--	--	--	--	--	--	--
MAY											
23...	21	55	13	<.1	--	4	--	--	--	--	--
JUN											
20...	--	66	24	--	--	--	--	--	--	--	--
JUL											
25...	--	66	22	--	--	--	--	--	--	--	--
SEP											
12...	--	68	31	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1983	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1984	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JUN	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUL	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
SEP	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV * 1983	--	--	--	--	--	--	--	--	--	--	8
10...	--	--	--	--	--	--	--	--	--	--	<1
MAR * 1984	--	--	--	--	--	--	--	--	--	--	<1
27...	--	--	--	--	--	--	--	--	--	--	<1
MAY	--	--	--	--	--	--	--	--	--	--	<1
23...	--	--	--	--	--	--	--	--	--	--	<1
JUN	--	--	--	--	--	--	--	--	--	--	<1
20...	--	--	--	--	--	--	--	--	--	--	<1
JUL	--	--	--	--	--	--	--	--	--	--	<1
25...	--	--	--	--	--	--	--	--	--	--	<1
SEP	--	--	--	--	--	--	--	--	--	--	<1
12...	--	--	--	--	--	--	--	--	--	--	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1983											
10...	--	1	16	110	--	2600	290	--	5	--	<11
MAR , 1984											
27...	1.1	--	16	100	--	--	290	--	--	--	--
MAY											
23...	1.0	2	18	96	--	2000	270	--	14	8.8	<9.4
JUN											
20...	3.4	--	18	110	--	2600	320	--	--	--	--
JUL											
25...	1.8	--	17	110	--	2600	300	--	--	--	--
SEP											
12...	2.1	--	18	120	--	2700	310	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY FIELD AS CAC03 (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1983	--	<10	.050	1	97	--	--	170	<.010	<1	75	--
MAR , 1984	--	--	<.010	1	--	--	--	150	--	--	75	--
MAY	--	10	.040	2	100	--	--	90	.042	<1	69	--
JUN	--	--	.030	2	--	--	--	130	--	--	79	--
JUL	--	--	.030	--	--	--	--	--	--	--	--	--
SEP	--	--	.030	1	--	--	--	150	--	--	77	--
12...	--	--	.030	1	--	--	--	150	--	--	77	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOC CI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
NOV , 1983											
09....	16	14	<10	--	K4	3	--	--	1.0	6	2
MAR , 1984											
27....	--	17	--	--	--	--	--	--	1.0	15	--
MAY											
24....	140	15	<10	--	K430	4	--	--	.50	5	<1
JUN											
21....	--	14	--	--	--	--	--	--	.60	12	--
JUL											
25....	--	--	--	--	--	--	--	--	--	--	--
SEP											
12....	--	14	--	--	--	--	--	--	.60	<3	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC DIS- SOLVED (MG/L AS C) (00691)
NOV * 1983											
09...	22	56	21	<.1	--	5	--	--	--	--	--
MAR * 1984											
27...	--	53	19	--	--	--	--	--	--	--	--
MAY											
24...	24	38	14	<.1	--	8	--	--	--	--	--
JUN											
21...	--	52	12	--	--	--	--	--	--	--	--
JUL											
25...	--	--	--	--	--	--	--	--	--	--	--
SEP											
12...	--	59	13	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1983	--	--	--	--	--	--	--	--	--	--	--
09....	--	--	--	--	--	--	--	--	--	--	--
MAR , 1984	--	--	--	--	--	--	--	--	--	--	--
27....	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--
24....	--	--	--	--	--	--	--	--	--	--	--
JUN	--	--	--	--	--	--	--	--	--	--	--
21....	--	--	--	--	--	--	--	--	--	--	--
JUL	--	--	--	--	--	--	--	--	--	--	--
25....	--	--	--	--	--	--	--	--	--	--	--
SEP	--	--	--	--	--	--	--	--	--	--	--
12....	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1983											
09....	--	--	--	--	--	--	--	--	--	--	7
MAR , 1984											
27....	--	--	--	--	--	--	--	--	--	--	2
MAY											
24....	--	--	--	--	--	--	--	--	--	--	<1
JUN											
21....	--	--	--	--	--	--	--	--	--	--	2
JUL											
25....	--	--	--	--	--	--	--	--	--	--	3
SEP											
12....	--	--	--	--	--	--	--	--	--	--	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1983											
09...	2.3	2	15	130	--	2000	260	--	6	2.0	<11
MAR , 1984											
27...	2.4	--	14	130	--	--	260	--	--	--	--
MAY											
24...	2.9	3	14	72	--	990	200	--	20	--	<8.5
JUN											
21...	2.7	--	16	100	--	1500	230	--	--	--	--
JUL											
25...	--	--	--	--	--	1700	--	--	--	--	--
SEP											
12...	2.6	--	16	120	--	2000	280	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY FIELD AS CAC03 (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (0060H)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS C03) (00445)
DEC , 1983	--	--	.050	2	93	--	--	160	--	--	86	--
JAN , 1984	--	--	.060	--	--	--	--	150	--	--	78	--
APR	--	--	.050	--	--	--	--	130	--	--	75	--
MAY	--	--	.130	3	100	--	--	80	--	--	77	--
JUN	--	--	.030	--	--	--	--	130	--	--	81	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOC CI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
DEC , 1983											
06...	--	15	--	--	--	--	--	--	.80	7	--
JAN , 1984											
26...	--	12	--	--	--	--	--	--	.90	--	--
APR											
13...	--	16	--	--	--	--	--	--	.70	--	--
MAY											
23...	--	11	--	--	--	--	--	--	.40	7	--
JUN											
21...	--	13	--	--	--	--	--	--	.60	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L) AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3) (71851)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO2) (71856)	OIL AND GREASE (MG/L) AS C) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L) AS C) (00682)	CARBON, INOR- GANIC DIS- SOLVED (MG/L) AS C) (00691)
DEC , 1983											
06...	27	74	28	--	--	6	--	--	--	--	--
JAN , 1984											
26...	--	64	--	--	--	--	--	--	--	--	--
APR											
13...	--	56	--	--	--	--	--	--	--	--	--
MAY											
23...	25	44	9	--	--	11	--	--	--	--	--
JUN											
21...	--	59	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
DEC , 1983	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1984	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
APR	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JUN	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR. TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCR, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
DEC. 1983	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN. 1984	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
APR	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JUN	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SR) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
DEC , 1983											
06...	2.1	--	17	150	--	2900	330	--	8	--	--
JAN , 1984											
26...	1.9	--	15	130	--	2500	300	--	--	--	--
APR											
13...	2.4	--	14	120	--	1800	280	--	--	--	--
MAY											
23...	1.9	--	16	78	--	1300	210	--	10	--	--
JUN											
21...	2.6	--	17	110	--	1900	260	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LITY FIELD (MG/L AS CAC03) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS C03) (00445)
DEC , 1983	--	--	.100	3	98	--	--	220	--	--	73	--
JAN , 1984	--	--	.090	--	--	--	--	220	--	--	71	--
APR	--	--	.070	--	--	--	--	180	--	--	61	--
MAY	--	--	.140	2	110	--	--	100	--	--	71	--
JUN	--	--	.030	--	--	--	--	150	--	--	70	--
SEP	--	--	.020	<1	--	--	--	80	--	--	87	--
12....	--	--										

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L) AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
DEC , 1983											
06...	--	29	--	--	--	--	--	--	1.0	6	--
JAN , 1984											
26...	--	25	--	--	--	--	--	--	1.1	--	--
APR											
13...	--	25	--	--	--	--	--	--	.90	--	--
MAY											
23...	--	14	--	--	--	--	--	--	.40	8	--
JUN											
21...	--	18	--	--	--	--	--	--	.60	--	--
SEP											
12...	--	7.8	--	--	--	--	--	--	.30	<3	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
DEC , 1983											
06...	39	72	8	--	--	7	--	--	--	--	--
JAN , 1984											
26...	--	67	--	--	--	--	--	--	--	--	--
APR											
13...	--	58	--	--	--	--	--	--	--	--	--
MAY											
23...	28	45	6	--	--	12	--	--	--	--	--
JUN											
21...	--	58	--	--	--	--	--	--	--	--	--
SEP											
12...	--	70	7	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
DEC , 1983	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1984	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
APR	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JUN	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
SEP	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
DEC 1983	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1984	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
APR	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JUN	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
SEP	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
DEC , 1983											
06...	2.2	--	16	240	--	2400	340	--	7	--	--
JAN , 1984											
26...	2.1	--	15	220	--	2300	310	--	--	--	--
APR											
13...	2.6	--	14	190	--	1800	290	--	--	--	--
MAY											
23...	2.3	--	16	97	--	1300	230	--	9	--	--
JUN											
21...	2.8	--	17	150	--	1800	280	--	--	--	--
SEP											
12...	1.3	--	16	120	--	2700	340	--	--	--	--

C-B THACT AND USGS DOC FRACTIONATION RESULTS
WATER QUALITY (MG/L)

LOC	YR	MO	DAY	DISSOLVED ORGANIC CARBON (PPM C)	TOTAL HYDROPHOBICS (PPM C)	HYDROPHOBICS BASES (PPM C)	HYDROPHOBICS ACIDS (PPM C)	HYDROPHOBICS NEUTRALS (PPM C)	TOTAL HYDROPHILICS (PPM C)	HYDROPHILICS BASES (PPM C)	HYDROPHILICS ACIDS (PPM C)	HYDROPHILICS NEUTRALS (PPM C)
6007	80	9	15	4.2	2.0		1.2	.8	2.2	.3	1.8	.1
	81	4	15	4.7	2.2		1.4	.2	2.6	.1	2.2	.2
	82	10	19	6.3	1.7	.1	1.5	.6	2.9	.4	2.4	.1
	83	11	12	4.6	2.9		2.2	.7	3.4	.2	3.1	.3
6042	81	5	10	8.1	3.4		2.7	.7	4.7	.2	3.8	.7
	82	4	15	3.3	2.5	.1	.9	1.6	.9	.3	.1	.5
	83	5	10	4.9	2.6	.1	1.2	1.3	2.3	.1	.9	1.1
	80	9	15	3.6	1.6		1.0	.6	2.0	.3	1.6	.1
6061	81	4	15	3.8	1.8		1.2	1.0	2.8	.4	1.3	.4
	82	5	19	6.2	2.1		2.1	.6	4.0	.4	3.2	.2
	83	11	3	3.8	1.6		1.2	.5	2.5	.3	1.6	.3
	83	5	11	8.5	3.4	.1	2.9	.4	5.1	.4	3.7	1.0

NOTE: - INDICATES LESS THAN

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200
LATITUDE 400018

LONGITUDE 1074929

WHITE RIVER ABOVE COAL CREEK, NEAR WEEKER, CO.
DRAINAGE AREA 648.00STREAM 6400.00
SOURCE AGENCY USGS
STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	408	370	388	435	374	400	358	348	353	376	350	367
2	406	370	389	424	377	400	351	343	348	403	377	391
3	399	365	382	415	344	369	361	349	352	394	365	384
4	396	360	376	356	340	353	354	343	349	372	343	357
5	400	357	374	389	360	378	363	344	353	365	352	359
6	396	357	374	---	---	---	384	352	370	374	358	367
7	402	360	381	---	---	---	367	358	363	377	361	369
8	396	356	373	---	---	---	358	349	354	379	362	373
9	390	356	364	---	---	---	357	348	351	382	368	374
10	363	356	359	361	357	359	359	353	355	403	372	390
11	405	350	364	359	343	350	366	356	358	393	377	386
12	402	353	373	---	---	---	365	360	363	382	376	379
13	398	352	370	---	---	---	367	357	362	395	377	386
14	398	346	363	---	---	---	366	323	361	378	371	375
15	382	345	357	---	---	---	359	339	352	386	376	382
16	369	361	364	374	361	369	367	341	356	415	387	401
17	373	366	369	363	351	358	363	348	355	408	398	402
18	377	370	374	357	339	347	368	331	354	419	400	410
19	372	344	348	355	341	347	364	353	357	422	409	418
20	355	346	352	359	351	356	402	354	377	409	404	407
21	355	345	350	357	348	353	408	374	397	408	399	403
22	394	345	361	356	350	354	395	373	385	403	385	393
23	400	345	374	376	356	366	372	362	366	388	379	384
24	404	347	367	369	360	365	375	368	371	387	381	384
25	410	347	371	359	339	347	369	338	353	385	374	381
26	401	349	375	347	335	339	337	325	330	385	375	380
27	414	348	368	361	348	355	351	325	341	388	376	384
28	411	356	375	358	344	351	379	352	367	392	380	387
29	427	359	388	348	337	344	416	381	395	404	387	397
30	433	368	388	363	319	341	399	355	372	412	387	398
31	440	374	408	---	---	---	355	346	351	401	393	397
MONTH	440	344	372	435	319	359	416	323	360	422	343	386

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO. STREAM SOURCE AGENCY USGS
 LATITUDE 400018 LONGITUDE 1074929 DRAINAGE AREA 648.00 DATUM 6400.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	202	183	192	---	---	---	288	281	285	334	302	318
2	208	192	200	---	---	---	302	289	294	322	306	314
3	209	195	203	208	202	205	305	296	301	336	323	329
4	207	199	203	211	187	197	308	297	303	338	329	333
5	---	---	---	231	19	210	311	302	307	337	329	334
6	225	201	215	---	---	---	303	286	294	338	329	334
7	215	181	198	---	---	---	303	295	299	339	332	335
8	186	179	183	---	---	---	309	299	305	337	331	334
9	208	185	192	---	---	---	315	303	309	336	330	334
10	240	209	227	245	214	221	313	304	309	338	330	335
11	235	212	225	253	248	250	315	302	310	339	331	335
12	232	221	226	263	259	262	314	306	310	333	322	328
13	229	219	225	269	261	266	318	309	314	328	321	325
14	219	210	215	272	266	269	320	311	317	332	327	330
15	210	202	207	283	278	280	322	315	319	336	323	332
16	204	199	201	286	279	283	327	310	316	328	312	322
17	209	201	205	295	287	291	323	315	320	337	309	324
18	209	201	205	300	291	296	327	312	323	343	337	340
19	208	202	205	295	290	293	319	313	316	346	339	343
20	203	198	0	298	290	294	325	284	304	350	336	343
21	198	171	186	294	288	292	309	293	300	344	335	340
22	184	167	174	296	288	292	313	307	310	346	333	340
23	189	169	181	294	290	293	324	319	322	347	339	343
24	192	180	186	293	273	280	324	311	316	349	338	344
25	192	179	187	283	269	274	315	309	312	339	328	334
26	205	189	195	292	271	282	323	315	317	348	335	341
27	202	184	194	298	284	291	328	322	325	349	338	344
28	205	188	194	302	292	297	330	322	327	346	335	341
29	---	---	---	302	295	299	330	324	327	354	336	343
30	---	---	---	303	285	294	342	329	332	365	342	350
31	---	---	---	285	272	279	337	330	334	---	---	---
MONTH	240	167	193	303	19	272	342	281	312	365	302	335
YEAR	440	19	338									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200 LONGITUDE 1074929 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO. STREAM SOURCE AGENCY USGS
 LATITUDE 400018 DRAINAGE AREA 648.00 DATUM 6400.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C). WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	9.0	10.0	7.5	5.5	6.5	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
2	10.0	8.0	9.0	7.0	5.0	6.0	3.0	1.0	2.0	.0	.0	.0	.0	.0	.0
3	8.0	6.0	7.0	7.0	4.5	6.5	2.5	.0	1.5	.0	.0	.0	.0	.0	.0
4	10.0	5.0	7.5	7.0	3.5	5.5	2.5	.0	1.0	.0	.0	.0	.0	.0	.0
5	10.5	6.0	8.5	6.5	4.0	5.5	.0	.0	.0	.0	.0	.0	.5	.0	.0
6	11.0	7.0	9.0	7.0	4.0	5.5	.0	.0	.0	.0	.0	.0	.5	.0	.0
7	9.5	7.0	9.0	7.0	4.0	5.5	.5	.0	.0	.0	.0	.0	.5	.0	.0
8	10.5	8.5	8.5	7.0	3.5	5.0	2.0	.5	1.0	.0	.0	.0	.5	.0	.0
9	10.5	8.0	9.0	3.5	1.5	2.5	2.5	.5	1.5	.0	.0	.0	1.0	.0	.5
10	9.5	8.0	9.0	4.0	2.0	3.0	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0
11	9.0	7.0	8.0	5.0	3.0	4.0	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0
12	9.0	5.5	7.5	5.5	3.5	4.5	3.0	2.0	2.0	.0	.0	.0	.0	.0	.0
13	9.0	5.5	7.5	6.0	4.0	4.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0
14	8.5	6.5	7.0	4.5	2.0	3.0	.5	.0	.0	.0	.0	.0	.5	.0	.0
15	7.5	5.0	6.0	2.5	.5	1.5	1.0	.0	.5	.0	.0	.0	.0	.0	.0
16	7.0	4.0	5.5	3.0	.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	7.5	4.0	6.0	4.5	1.5	3.0	1.5	.0	.5	.0	.0	.0	.0	.0	.0
18	8.5	6.5	7.5	4.0	2.5	3.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0
19	7.5	4.5	6.5	3.0	1.0	2.0	1.5	.0	.5	.0	.0	.0	.0	.0	.0
20	7.0	3.5	5.5	3.0	1.0	2.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
21	8.0	4.0	6.0	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
22	8.0	4.0	6.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
23	8.0	4.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	6.5	4.5	5.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	7.0	4.0	5.5	2.5	.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	7.0	3.5	5.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0	.5	.0	.0
27	7.0	3.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	6.5	3.5	5.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
29	7.0	4.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
30	7.0	4.5	6.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	7.5	5.5	6.5	---	---	---	.5	.0	.0	.0	.0	.0	.5	.0	.0
MONTH	11.5	3.5	7.0	7.5	.0	4.0	3.0	.0	.5	.0	.0	.0	1.0	.0	.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200
LATITUDE 400018

LONGITUDE 1074929

WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO.
DRAINAGE AREA 648.00STREAM 6400.00
STATE 08
COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.5	.0	.0	4.0	.0	2.0	---	---	---	7.5	4.5	6.5
2	.5	.0	.0	4.5	.5	3.0	---	---	---	8.5	4.5	6.5
3	.5	.0	.0	4.5	2.0	3.5	---	---	---	9.0	4.5	6.5
4	1.0	.0	.5	3.0	.5	1.5	---	---	---	8.0	4.5	7.0
5	1.0	.0	.5	1.0	.5	.5	9.0	7.5	8.5	9.0	5.0	7.0
6	1.0	.0	.5	2.0	.0	1.0	8.5	5.0	7.0	8.5	5.0	7.0
7	1.0	.0	.5	3.5	.5	1.5	8.5	5.5	7.0	9.5	3.5	6.5
8	2.0	.0	.5	4.5	.0	2.5	10.0	4.0	7.5	11.5	4.0	8.0
9	1.0	.0	.5	4.5	.5	3.0	8.5	4.5	5.5	12.0	5.5	9.0
10	3.0	.0	1.0	6.5	1.0	4.0	7.0	2.0	4.5	12.0	6.0	9.0
11	1.0	.0	.5	5.5	2.5	4.0	6.5	3.0	4.5	11.5	5.5	8.5
12	1.0	.0	.5	4.5	1.0	3.0	6.0	.5	3.5	10.0	5.0	7.5
13	3.0	.0	1.5	6.0	.5	3.5	8.5	3.0	6.0	9.0	4.0	6.5
14	3.0	1.0	2.0	5.5	3.0	4.0	8.5	3.0	6.0	10.5	4.5	7.0
15	2.5	.0	1.0	6.5	1.5	4.0	9.5	3.5	6.5	9.0	4.5	7.0
16	2.0	.0	.5	5.5	3.5	4.5	11.0	4.5	8.0	9.5	5.0	7.0
17	1.5	.0	1.0	5.5	1.0	3.0	11.5	5.0	8.5	10.0	3.5	7.0
18	2.0	.0	1.0	4.0	1.0	2.5	11.0	6.5	9.0	8.0	4.5	6.5
19	1.5	.0	.5	6.0	.5	3.5	9.0	6.0	7.5	10.5	4.5	7.5
20	1.0	.0	.5	6.5	1.0	4.0	6.0	4.0	5.0	10.5	5.0	7.5
21	1.0	.0	.5	8.5	2.5	5.5	7.5	2.5	5.0	9.0	5.0	7.0
22	2.5	.0	1.0	5.5	2.5	4.0	8.5	2.5	5.5	11.0	5.0	8.0
23	1.0	.0	.5	6.5	1.5	4.5	10.0	4.5	7.5	11.5	5.0	8.0
24	2.0	.0	.5	7.5	2.0	5.0	8.5	5.5	7.0	9.5	5.5	8.0
25	1.5	.0	.5	6.5	3.0	5.0	7.5	3.0	4.5	10.0	5.5	7.5
26	3.0	.0	1.0	4.5	2.0	3.5	6.0	1.5	3.5	11.0	5.0	8.0
27	1.0	.0	.5	6.0	2.0	4.0	7.5	1.5	4.5	10.5	5.5	8.0
28	1.5	.0	.5	6.5	2.0	5.5	5.5	1.5	4.0	10.5	5.0	8.0
29	---	---	1.5	6.0	2.5	4.5	8.0	2.5	5.5	11.5	5.5	8.5
30	---	---	---	5.5	3.0	4.0	7.5	4.0	5.5	10.5	6.0	8.5
31	---	---	---	---	---	---	---	---	---	9.5	6.5	7.5
MONTH	3.0	.0	.5	8.5	.0	3.5	11.5	.5	6.0	12.0	3.5	7.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

STATION NUMBER 09304200
LATITUDE 40001A

LONGITUDE 1074929

WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO.
DRAINAGE AREA 648.00 DATUM 6400.00STREAM SOURCE AGENCY USGS
STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	6.5	7.5	14.0	9.0	11.5	15.5	12.0	14.0	15.0	12.0	13.5
2	11.0	5.0	7.5	14.5	10.0	12.5	15.5	11.5	13.5	14.5	9.0	12.0
3	9.5	6.5	8.0	14.5	10.0	12.5	15.5	11.5	13.5	15.0	9.5	12.5
4	9.5	5.5	8.0	14.5	10.0	12.5	17.0	11.5	14.5	15.0	10.0	12.5
5	9.0	6.5	7.0	15.0	10.0	12.5	15.5	12.0	14.0	15.5	10.5	13.0
6	6.5	5.0	6.0	---	---	---	16.0	12.0	14.0	15.0	11.0	13.0
7	7.5	4.5	6.5	---	---	---	17.0	12.0	14.5	13.0	11.5	12.0
8	6.5	4.5	5.5	---	---	---	17.0	11.5	14.6	13.5	8.5	11.0
9	8.5	4.5	6.0	---	---	---	17.5	12.0	15.0	15.0	9.5	12.0
10	---	---	---	---	---	---	17.0	12.0	14.5	15.0	10.0	13.0
11	---	---	---	16.0	14.5	15.5	17.0	12.0	14.5	13.0	10.5	11.5
12	---	---	---	16.0	10.5	13.5	16.0	12.5	14.5	13.5	10.0	11.5
13	12.5	8.0	11.0	15.0	12.5	13.5	17.0	12.5	15.0	14.5	11.0	12.5
14	12.5	7.5	10.0	15.0	12.0	13.5	18.0	13.5	16.0	15.0	10.5	13.0
15	11.5	8.5	10.0	15.5	12.0	14.0	16.5	13.0	14.5	13.5	10.5	12.0
16	10.0	7.5	8.5	16.5	11.0	14.0	16.0	13.0	14.5	12.5	10.5	11.5
17	11.5	7.0	9.5	16.5	11.0	14.0	17.5	12.5	15.0	14.0	9.0	11.5
18	10.5	7.0	9.0	17.0	11.5	14.5	16.0	13.5	15.0	14.5	10.0	12.5
19	11.5	7.0	9.5	17.0	12.0	15.0	16.5	12.5	14.5	13.5	10.5	12.0
20	12.0	8.0	10.0	17.0	12.5	15.0	15.5	12.0	13.5	14.0	9.5	11.5
21	12.0	7.5	10.0	18.0	12.5	15.5	14.0	11.0	12.5	13.5	11.0	12.0
22	12.0	7.5	10.0	17.0	13.5	15.5	14.5	11.0	13.0	12.0	9.0	10.5
23	12.5	7.5	10.0	17.5	12.5	14.5	14.0	11.5	12.5	13.5	9.0	11.0
24	13.0	8.0	10.5	17.0	12.5	15.0	15.0	12.0	13.5	11.5	9.0	10.5
25	12.0	8.5	10.0	17.0	12.5	14.5	14.0	11.0	12.5	9.5	6.0	8.0
26	13.0	8.0	10.5	15.5	12.5	13.5	16.0	10.5	13.5	8.5	6.0	7.5
27	13.5	8.5	11.0	15.0	11.5	13.5	16.0	11.0	14.0	11.5	7.0	9.0
28	14.0	9.0	11.5	16.0	12.0	14.0	16.0	11.5	14.0	10.0	7.0	8.5
29	14.0	9.5	12.0	16.0	11.5	14.0	16.5	11.5	14.0	8.5	5.0	7.0
30	13.0	9.5	11.0	16.0	12.5	14.5	16.5	11.0	14.0	9.0	4.5	7.0
31	---	---	---	16.0	11.5	13.5	17.0	12.0	14.5	---	---	---
MONTH	14.0	4.5	9.0	18.0	9.0	14.0	18.0	10.5	18.5	15.5	4.5	11.0
YEAR	14.0	.0	6.5									

TABLE 1.2.2.1-2

Remark Codes for USGS
Water Quality Data

<u>CHARACTER</u>	<u>REMARK</u>
E	Estimated Value
<	Actual value is known to be less than value shown
>	Actual value is known to be greater than value shown
M	Presence of material verified but not quantified
N	Presumptive evidence of presence of material
ND	Material specifically analyzed for but not detected
K	Results based on colony count outside the acceptable range (non-ideal colony count)

TABLE 12.1-1

Method Data for 1955
Water Quality Data

CHARACTER	STATUS
1	Estimated Value
2	Actual value is known to be less than value shown
3	Actual value is known to be greater than value shown
4	Presence of material verified but not quantified
5	Presumptive evidence of presence of material
6	Material specifically analyzed for and not detected
7	Material known to exist in some form outside the acceptance range (non-point source status)

SPRINGS AND SEEPS

1.2.2.2 Springs and Seeps

Locations of springs and seeps on and around the C-b Tract are shown in Figure 1.2.1.2-1 of Section 1.2.1.2.

During this report period field data for pH or conductivity remained between the 20% range for these baseline values. Field measurement data for this reporting period are shown in the flow section, 1.2.1.2, Table 1.2.1.2-1. If a sample were required, parameters to be analyzed are listed in Table 1.2.2.2-1. A quarterly water sample was taken in August 1984 as shown in Table 1.2.2.2-2.

TABLE 1.2.2.2-1

Parameters Analyzed During IMP - Springs

Ag	Mo	Ca	TDS
AS	Cl	Mg	SO ₄
Ba	Li	Fluoride	CO ₃
Cd	Al	B	HCO ₃
Cr	Sr	Ni	NO ₃
Cu	Se	Oil & Grease	Alkalinity
Fe	Zn	Temperature	Hardness
Hg	pH	Kjeldahl-N	Phenols
Mn	Na	COD	Ammonia
Pb	K	BOD	DOC Fraction

Time series plots of temperature, pH and specific conductance are displayed in this section. Dashed lines on the pH and specific conductance plots represent the baseline mean. These plots can be referenced with Table 1.2.2.2-2.

TABLE 1.2.2.2-2

Parameter List of Springs and Seeps
Time Series Plots

<u>Station Code</u>		<u>Temperature</u>	<u>pH</u>	<u>Specific Conductance</u>	<u>Field Fluoride</u>
S-1	WS01	I-312	I-327	I-339	
S-2	WS02	I-313	I-328	I-340	
S-4	WS04	I-314	I-329	I-341	
S-6	WS06	I-315	I-330	I-342	
S-7	WS07	I-316	I-331	I-343	I-324
S-8	WS08	I-317	I-332	I-344	
S-9	WS09	I-318	I-333	I-345	
S-10	WS10	I-319	I-334	I-346	
SEEP A	WS11	I-320	I-335	I-347	
S-102	WS12	I-321	I-336	I-348	I-325
S-102A	WS13	I-322	I-337	I-349	I-326
S-11	WS36	I-323	I-338	I-350	
S-6A	WS66	I-323a	I-338a	I-350a	

TABLE 1.1.1.1

Frequency List of Species and
Their Number of Occurrences

Species	Frequency	Number of Occurrences	Number of Species
1-1	1-1	1-1	1-1
1-2	1-2	1-2	1-2
1-3	1-3	1-3	1-3
1-4	1-4	1-4	1-4
1-5	1-5	1-5	1-5
1-6	1-6	1-6	1-6
1-7	1-7	1-7	1-7
1-8	1-8	1-8	1-8
1-9	1-9	1-9	1-9
1-10	1-10	1-10	1-10
1-11	1-11	1-11	1-11
1-12	1-12	1-12	1-12
1-13	1-13	1-13	1-13
1-14	1-14	1-14	1-14
1-15	1-15	1-15	1-15
1-16	1-16	1-16	1-16
1-17	1-17	1-17	1-17
1-18	1-18	1-18	1-18
1-19	1-19	1-19	1-19
1-20	1-20	1-20	1-20
1-21	1-21	1-21	1-21
1-22	1-22	1-22	1-22
1-23	1-23	1-23	1-23
1-24	1-24	1-24	1-24
1-25	1-25	1-25	1-25
1-26	1-26	1-26	1-26
1-27	1-27	1-27	1-27
1-28	1-28	1-28	1-28
1-29	1-29	1-29	1-29
1-30	1-30	1-30	1-30
1-31	1-31	1-31	1-31
1-32	1-32	1-32	1-32
1-33	1-33	1-33	1-33
1-34	1-34	1-34	1-34
1-35	1-35	1-35	1-35
1-36	1-36	1-36	1-36
1-37	1-37	1-37	1-37
1-38	1-38	1-38	1-38
1-39	1-39	1-39	1-39
1-40	1-40	1-40	1-40
1-41	1-41	1-41	1-41
1-42	1-42	1-42	1-42
1-43	1-43	1-43	1-43
1-44	1-44	1-44	1-44
1-45	1-45	1-45	1-45
1-46	1-46	1-46	1-46
1-47	1-47	1-47	1-47
1-48	1-48	1-48	1-48
1-49	1-49	1-49	1-49
1-50	1-50	1-50	1-50
1-51	1-51	1-51	1-51
1-52	1-52	1-52	1-52
1-53	1-53	1-53	1-53
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1-69	1-69	1-69	1-69
1-70	1-70	1-70	1-70
1-71	1-71	1-71	1-71
1-72	1-72	1-72	1-72
1-73	1-73	1-73	1-73
1-74	1-74	1-74	1-74
1-75	1-75	1-75	1-75
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1-77	1-77	1-77	1-77
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1-93	1-93	1-93	1-93
1-94	1-94	1-94	1-94
1-95	1-95	1-95	1-95
1-96	1-96	1-96	1-96
1-97	1-97	1-97	1-97
1-98	1-98	1-98	1-98
1-99	1-99	1-99	1-99
1-100	1-100	1-100	1-100

TABLE 1.2.2.2-2

Parameter List of Springs and Seeps
Time Series Plots

<u>Station Code</u>		<u>Temperature</u>	<u>pH</u>	<u>Specific Conductance</u>	<u>Field Fluoride</u>
S-1	WS01	I-312	I-327	I-339	
S-2	WS02	I-313	I-328	I-340	
S-4	WS04	I-314	I-329	I-341	
S-6	WS06	I-315	I-330	I-342	
S-7	WS07	I-316	I-331	I-343	I-324
S-8	WS08	I-317	I-332	I-344	
S-9	WS09	I-318	I-333	I-345	
S-10	WS10	I-319	I-334	I-346	
SEEP A	WS11	I-320	I-335	I-347	
S-102	WS12	I-321	I-336	I-348	I-325
S-102A	WS13	I-322	I-337	I-349	I-326
S-11	WS36	I-323	I-338	I-350	

TABLE 1.2.2-2

Estimated List of Species and Subspecies
from 1970 to 1979

Year	Species	Subspecies	Year	Species	Subspecies
1970	100%	1-2	1970	100%	1-2
1971	100%	1-2	1971	100%	1-2
1972	100%	1-2	1972	100%	1-2
1973	100%	1-2	1973	100%	1-2
1974	100%	1-2	1974	100%	1-2
1975	100%	1-2	1975	100%	1-2
1976	100%	1-2	1976	100%	1-2
1977	100%	1-2	1977	100%	1-2
1978	100%	1-2	1978	100%	1-2
1979	100%	1-2	1979	100%	1-2

TABLE 1.2.2.2-3

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
SPRINGS

SPRING	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	H (UG/L)	TOTAL DISS SOLIDS (MG/L)	SR (UG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WS01	84	8					1.2	90.00		2700	350.0	7.4			
WS02	84	8					.8	70.00		2600	290.0	6.9			
WS08	84	8					1.4	120.00		3400	320.0	11.0			
WS09	84	8					1.0	100.00		3300	320.0	10.0			
WS11	84	8					1.0	110.00		2900	320.0	10.0			
WS12	84	8					1.5	470.00		1700	130.0	10.0			
WS13	84	8					1.7	470.00		1800	120.0	10.0			
WS36	84	8					1.0	90.00		2600	330.0	7.3			

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.2-3 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
SPRINGS

SPRING	YR	MO	TOTAL ALK (MG/L CACO3)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HC03 (MG/L CACO3)	CO3 (MG/L CACO3)	BR (MG/L)	HARDNESS (MG/L CACO3)	NA (MG/L)	MG (MG/L)	CA (MG/L)
WS01	84	8	419.0									120.0	74.0	82.0
WS02	84	8	376.0									110.0	62.0	74.0
WS08	84	8	471.0									120.0	75.0	94.0
WS09	84	8	449.0									120.0	74.0	94.0
WS11	84	8	428.0									110.0	70.0	94.0
WS12	84	8	749.0									280.0	43.0	50.0
WS13	84	8	768.0									280.0	45.0	51.0
WS36	84	8	407.0									120.0	68.0	83.0

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.2-3 (cont'd)

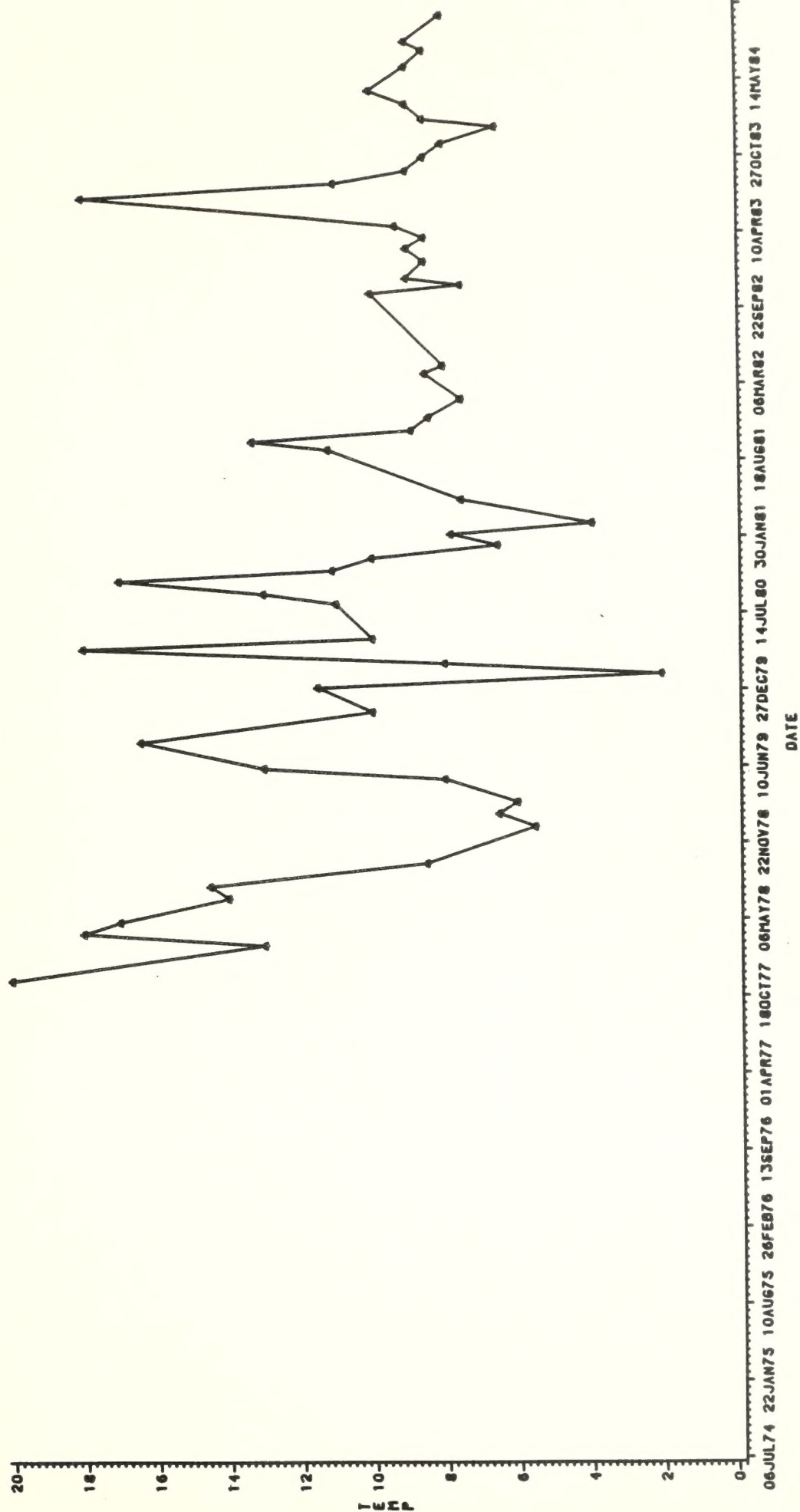
CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
SPRINGS

SPRING	YR	MO	SI02 (MG/L)	CYAN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WS01	84	8	16.0												.20
WS02	84	8	15.0												.30
WS08	84	8	18.0												.40
WS09	84	8	17.0												.40
WS11	84	8	16.0												.40
WS12	84	8	18.0												8.00
WS13	84	8	19.0												8.20
WS36	84	8	15.0												.30

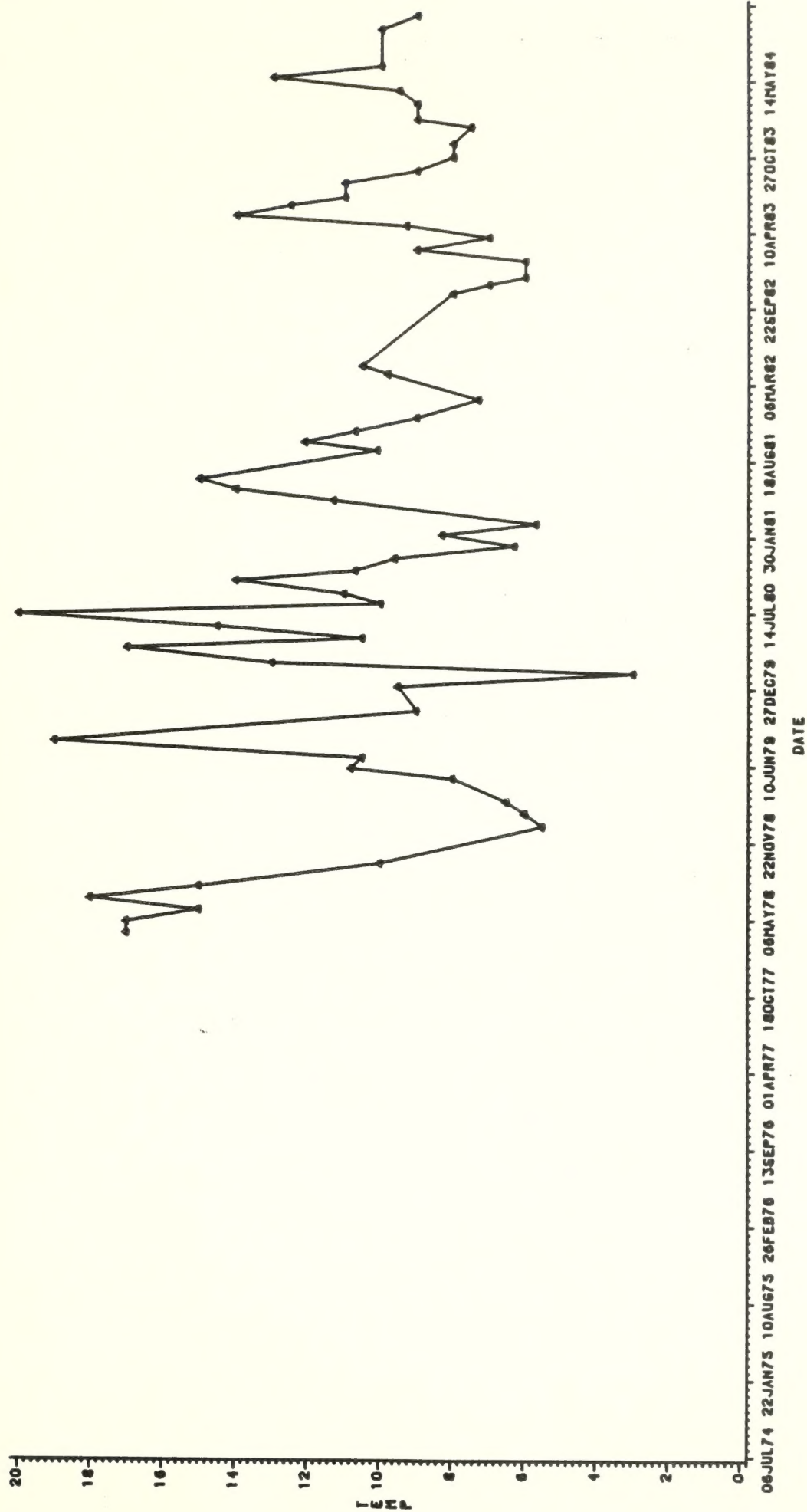
NOTE: - INDICATES LESS THAN

TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOC-NS01

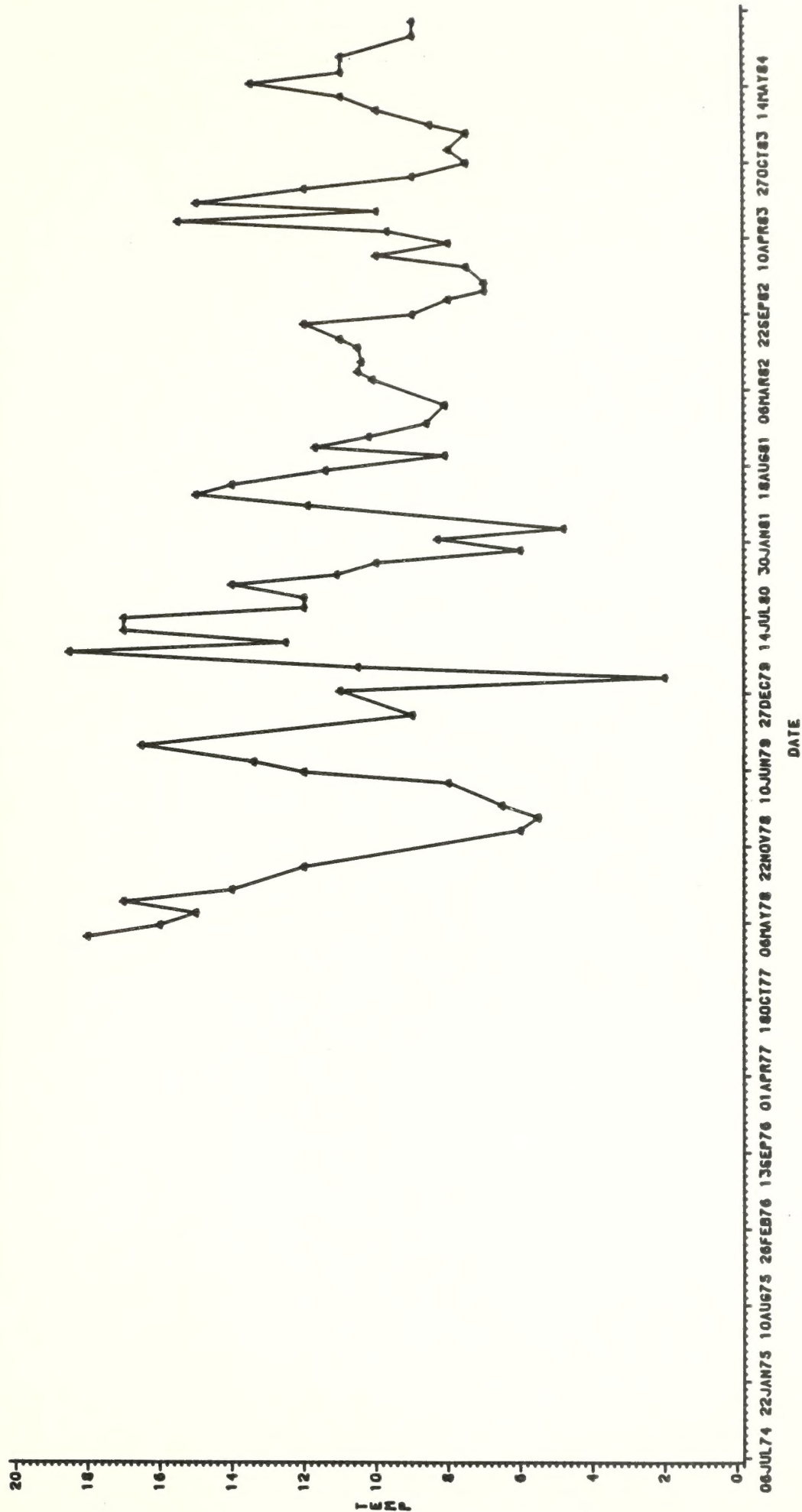


TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC-1502



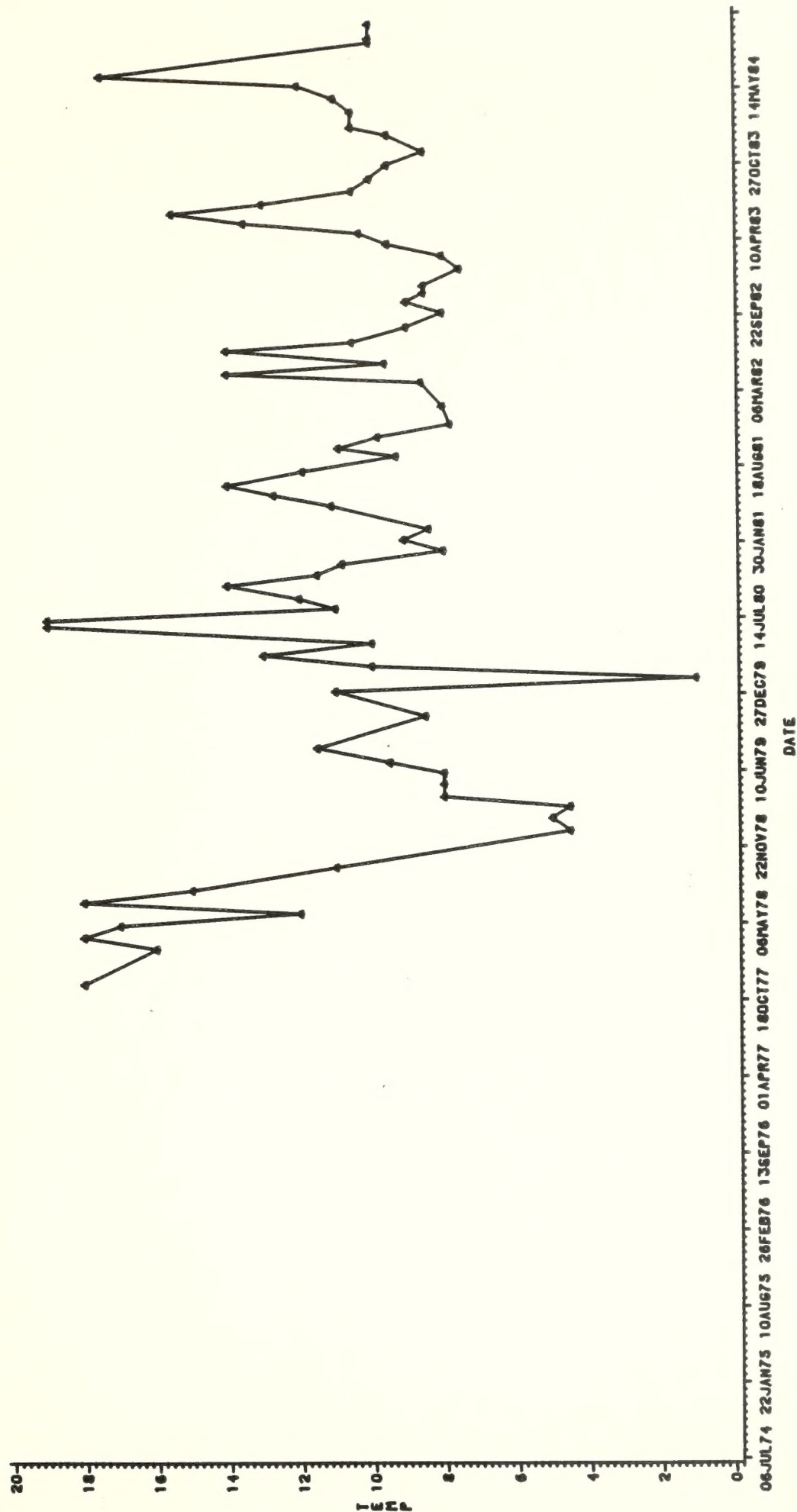
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOG-M504



TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOG-WS06



1014

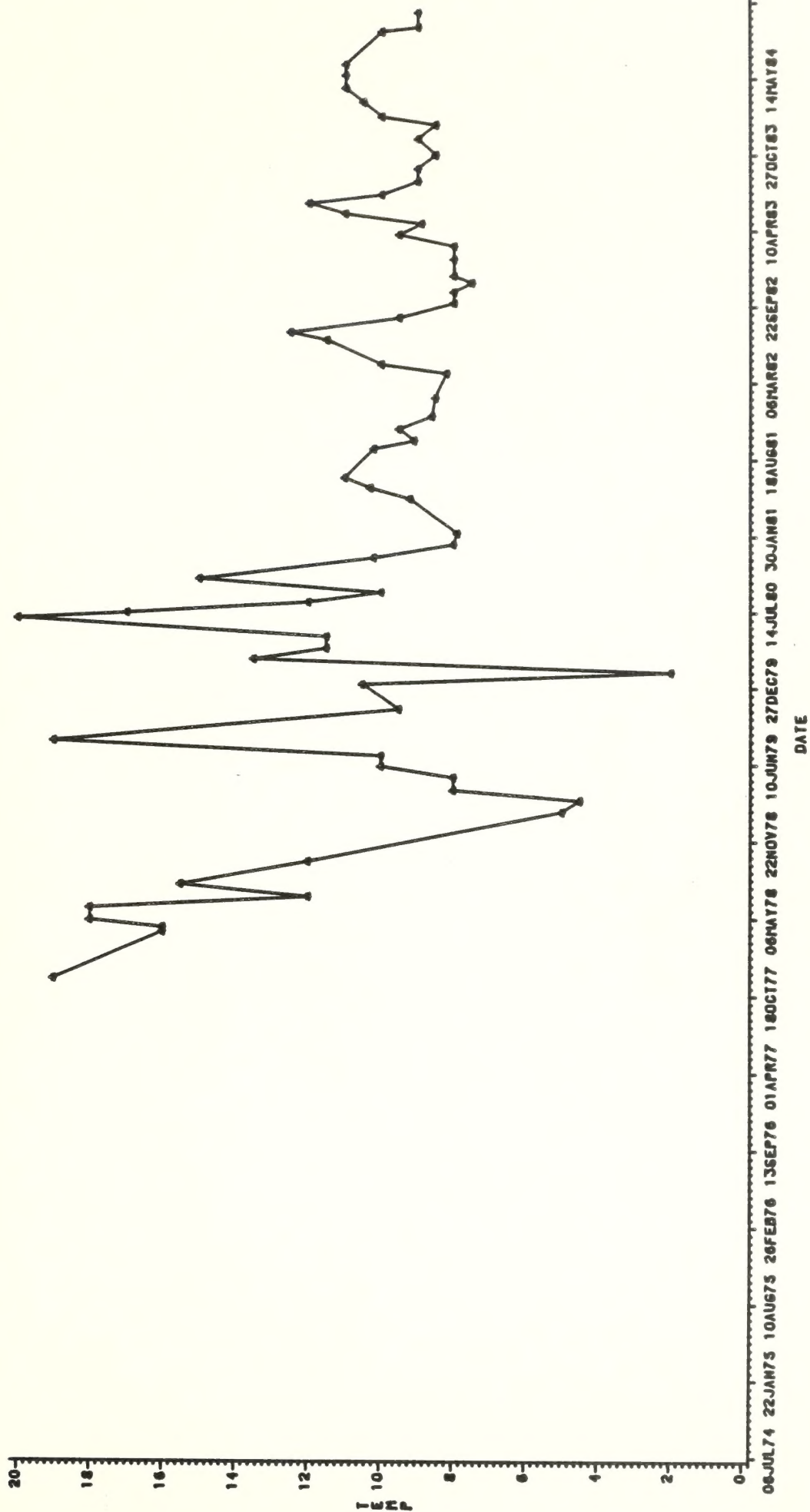
THESE DATA WERE OBTAINED FROM A SINGLE EXPERIMENT. THE Y-AXIS REPRESENTS THE LOG OF THE RATIO OF THE ACTIVITY OF THE TWO ISOTOPES, AND THE X-AXIS REPRESENTS THE LOG OF THE RATIO OF THE CONCENTRATIONS OF THE TWO ISOTOPES.



THESE DATA WERE OBTAINED FROM A SINGLE EXPERIMENT. THE Y-AXIS REPRESENTS THE LOG OF THE RATIO OF THE ACTIVITY OF THE TWO ISOTOPES, AND THE X-AXIS REPRESENTS THE LOG OF THE RATIO OF THE CONCENTRATIONS OF THE TWO ISOTOPES.

TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=NS07

LOG-4607



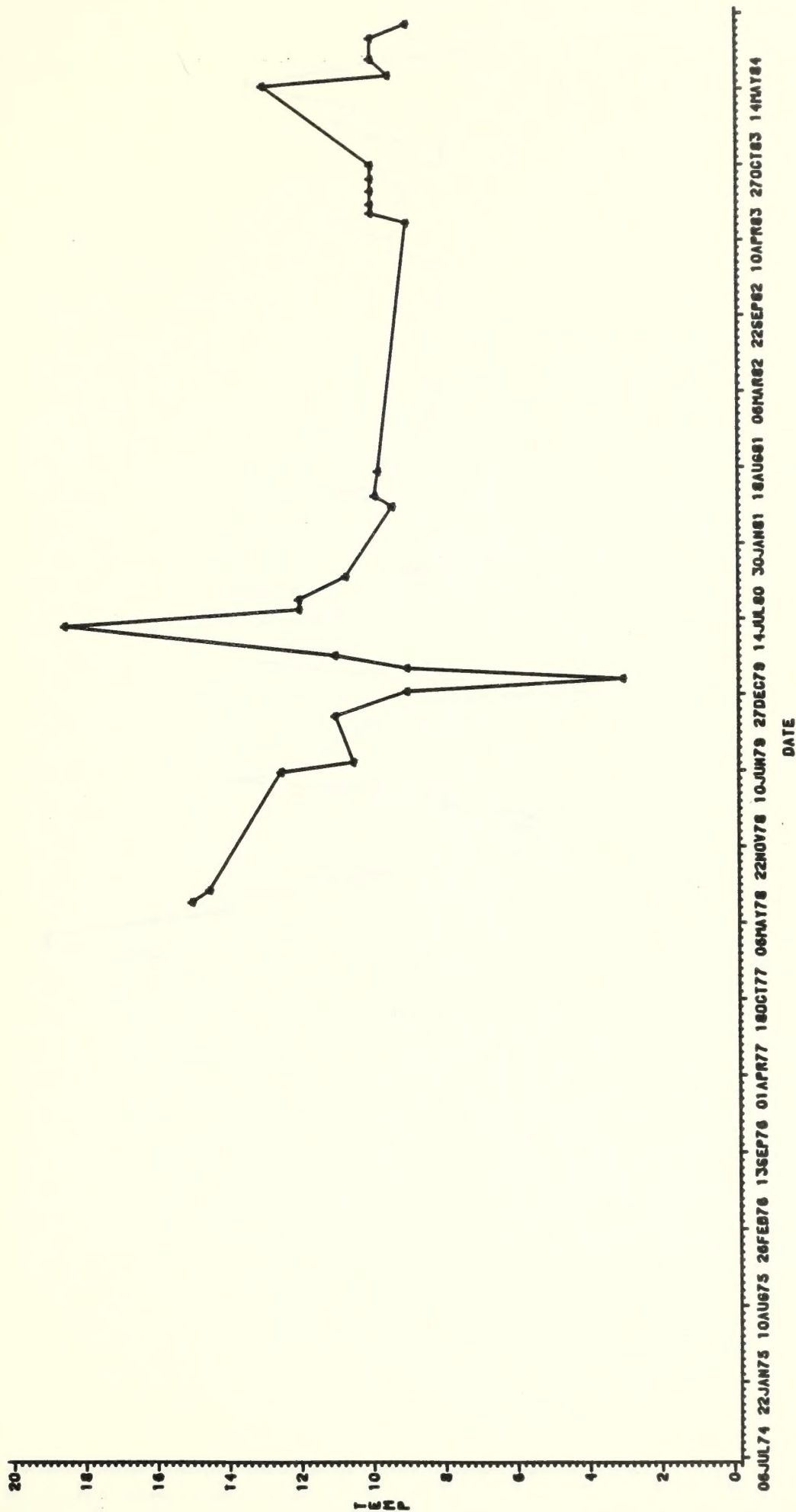
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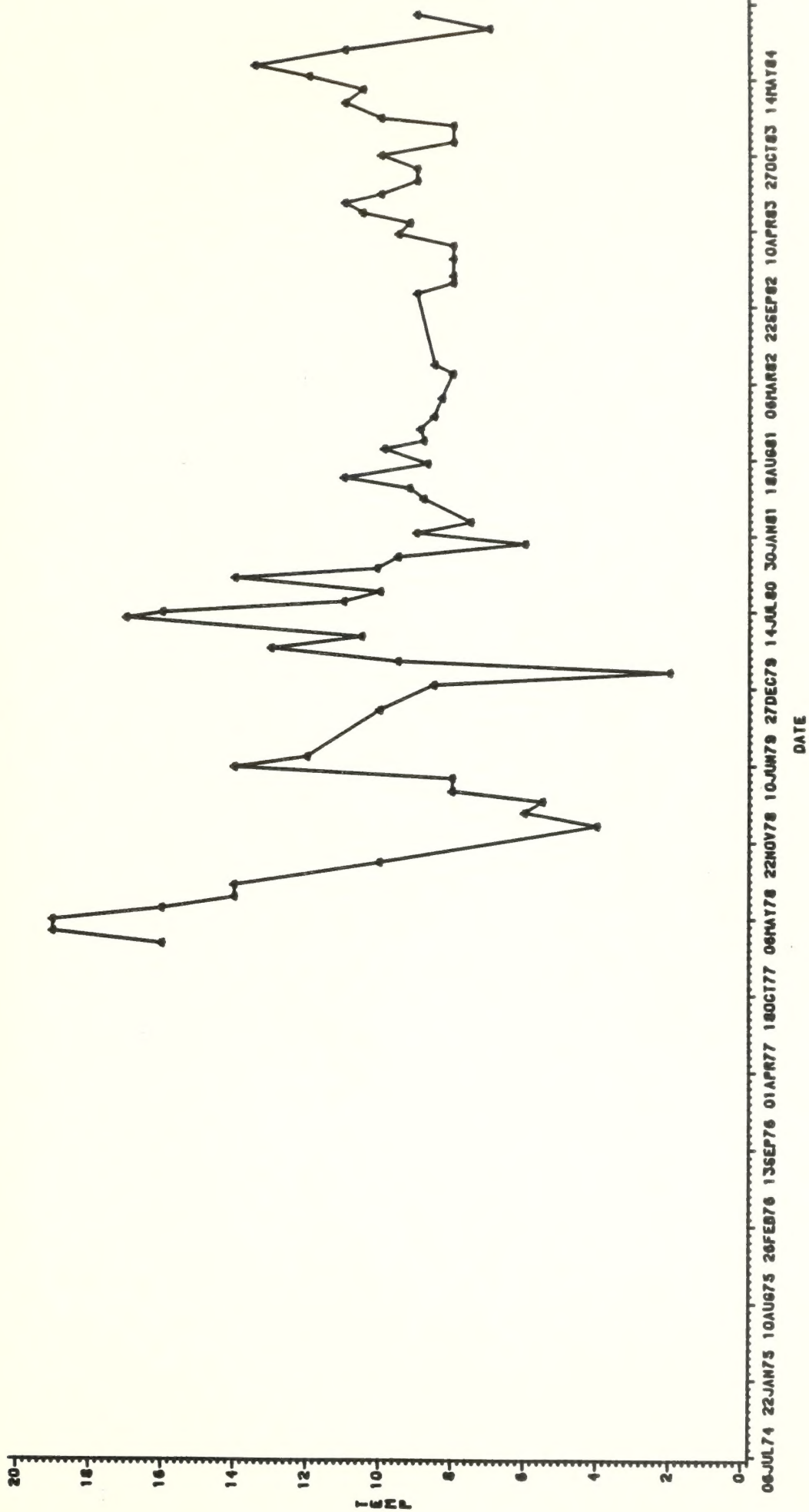
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LOC-16508



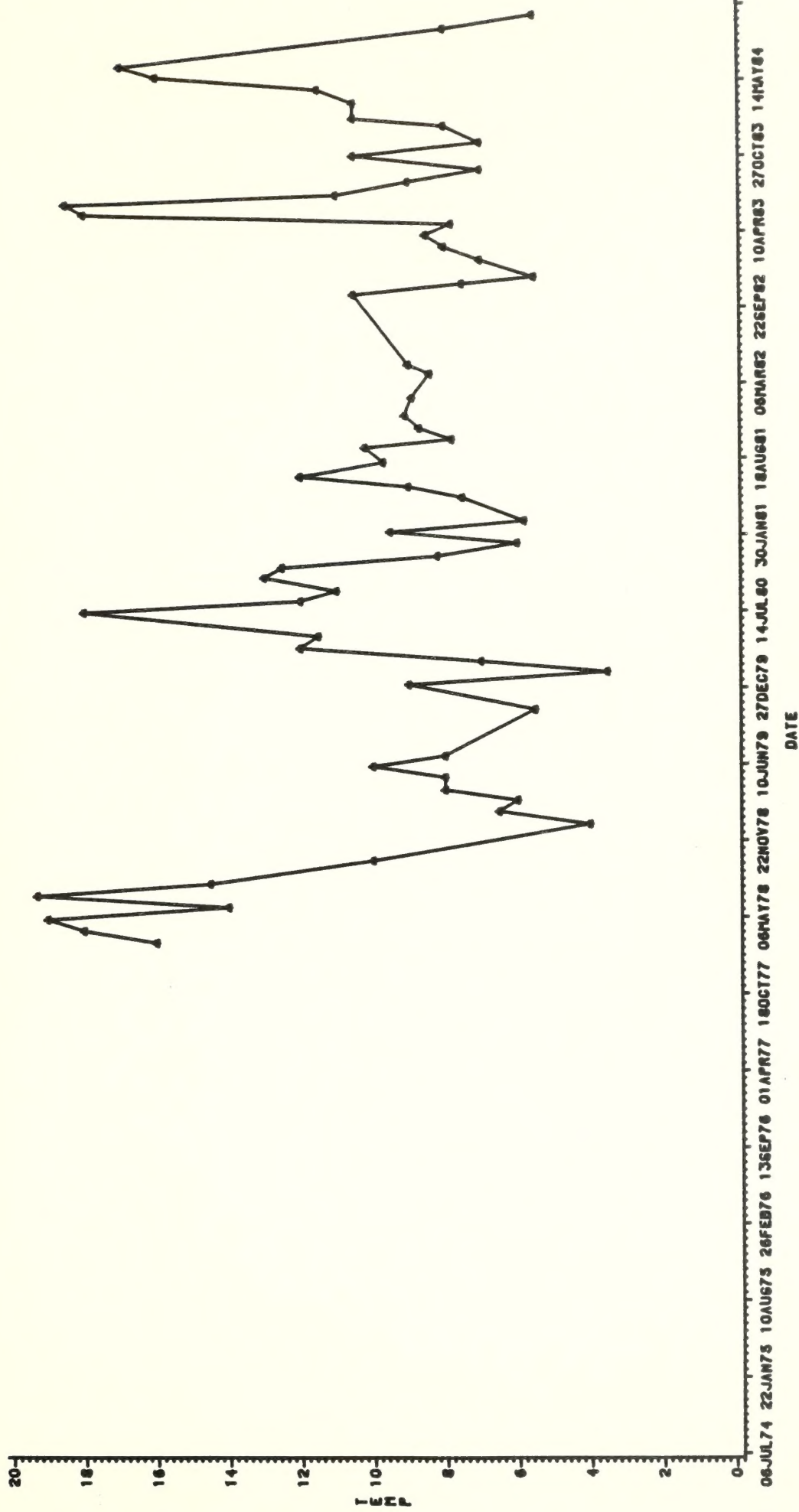
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LOC-WS08



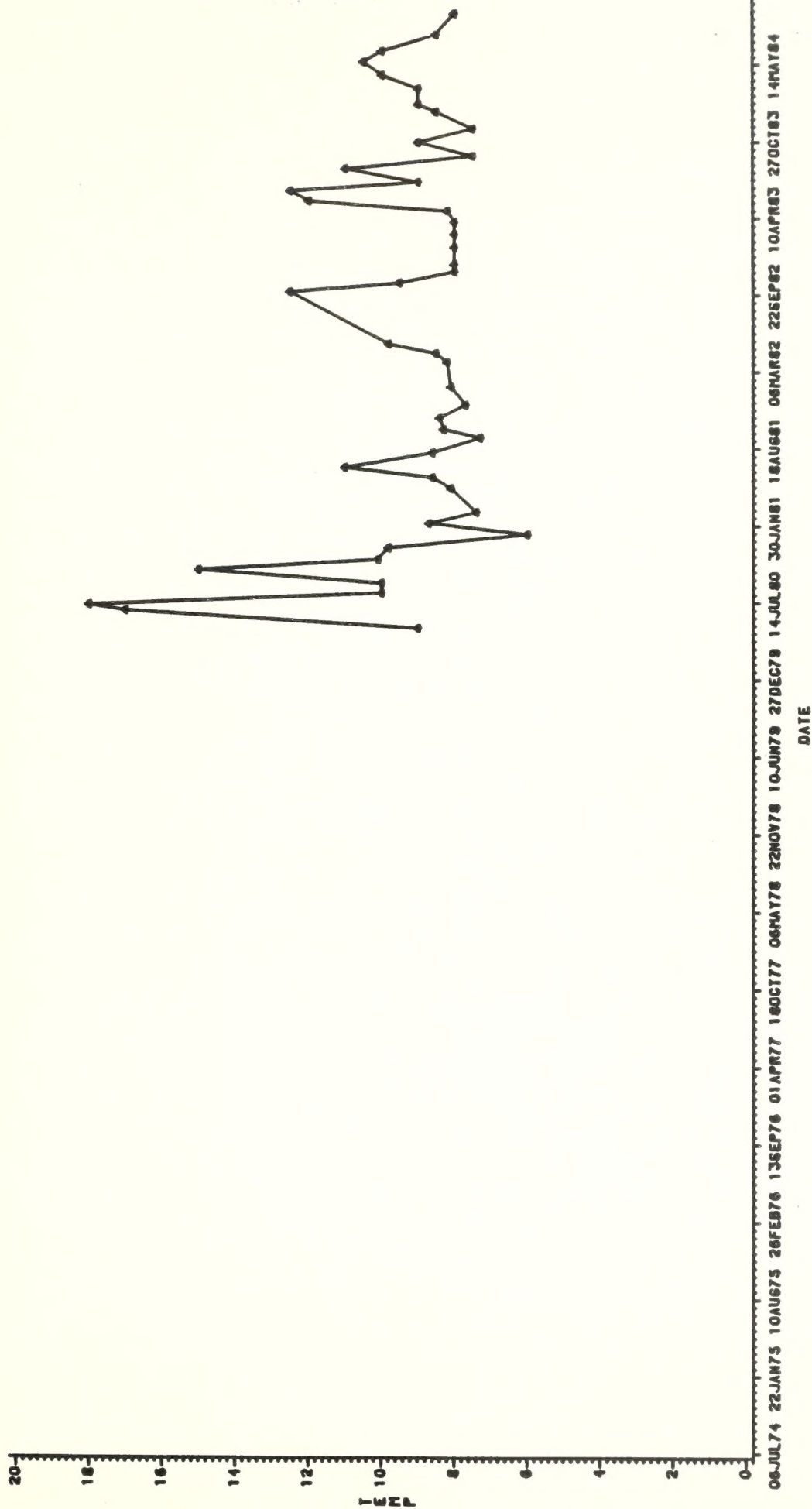
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOG-WS10



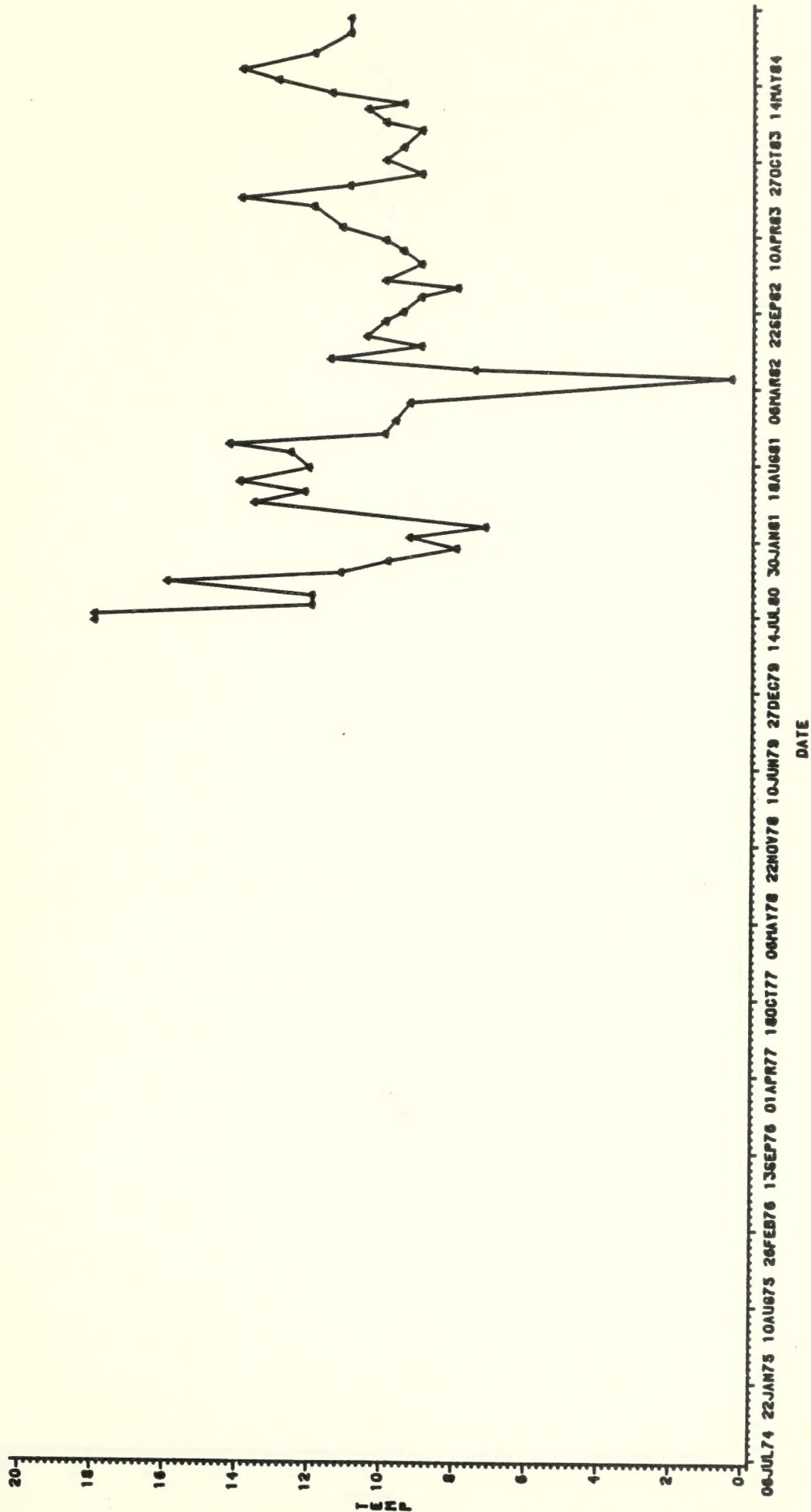
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOG-MS11



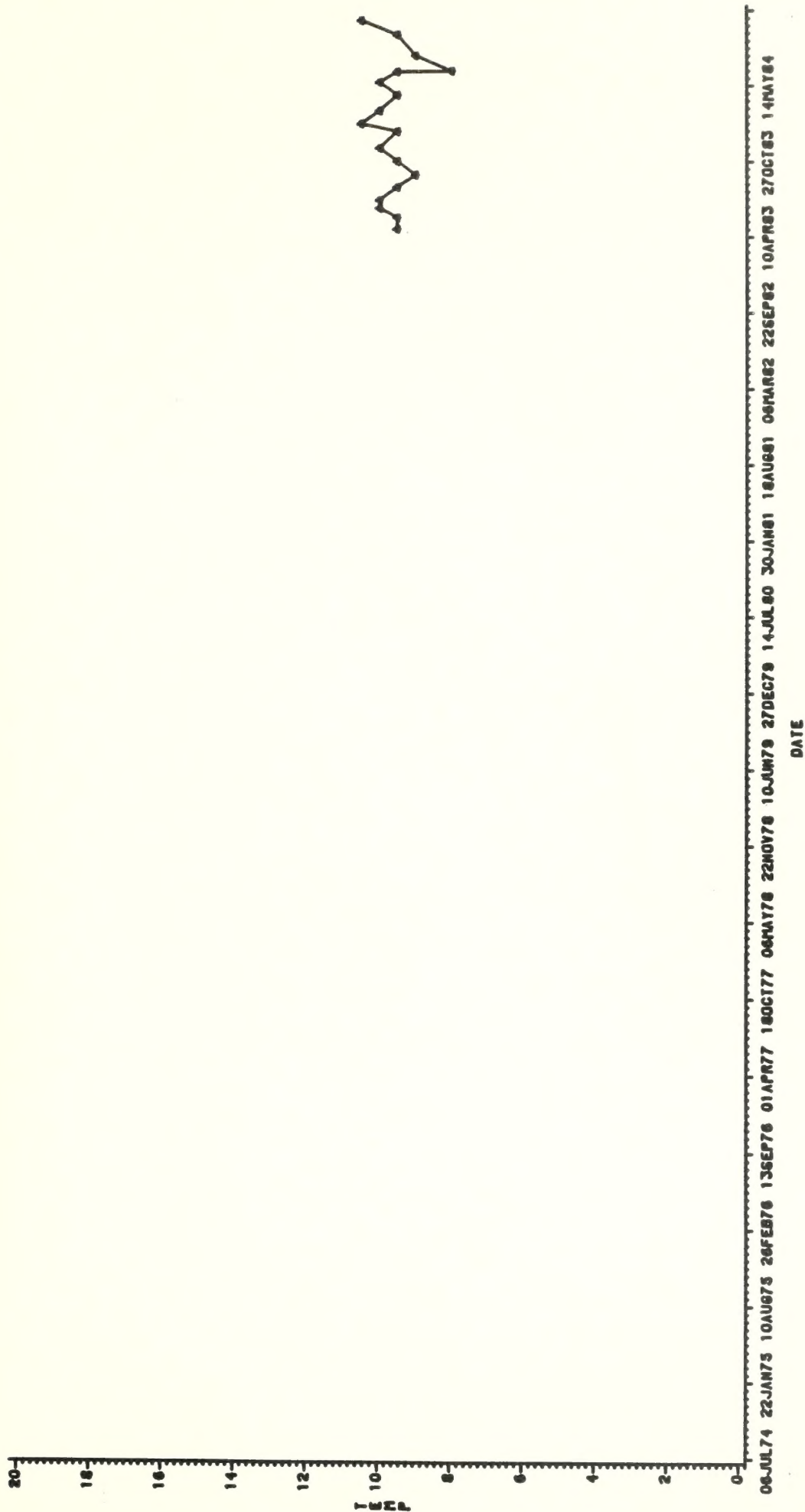
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOG-WS12



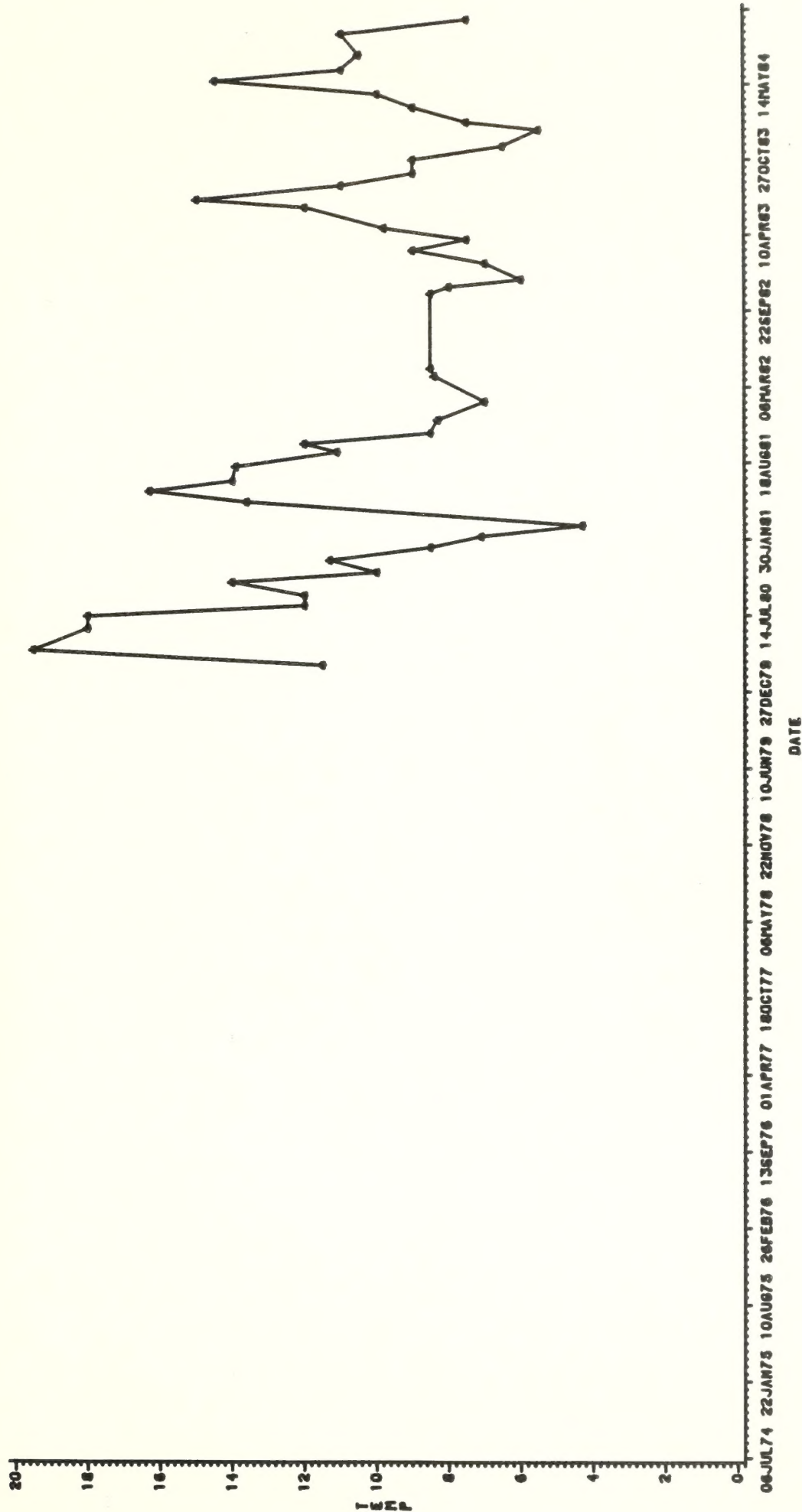
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LOC-WS13



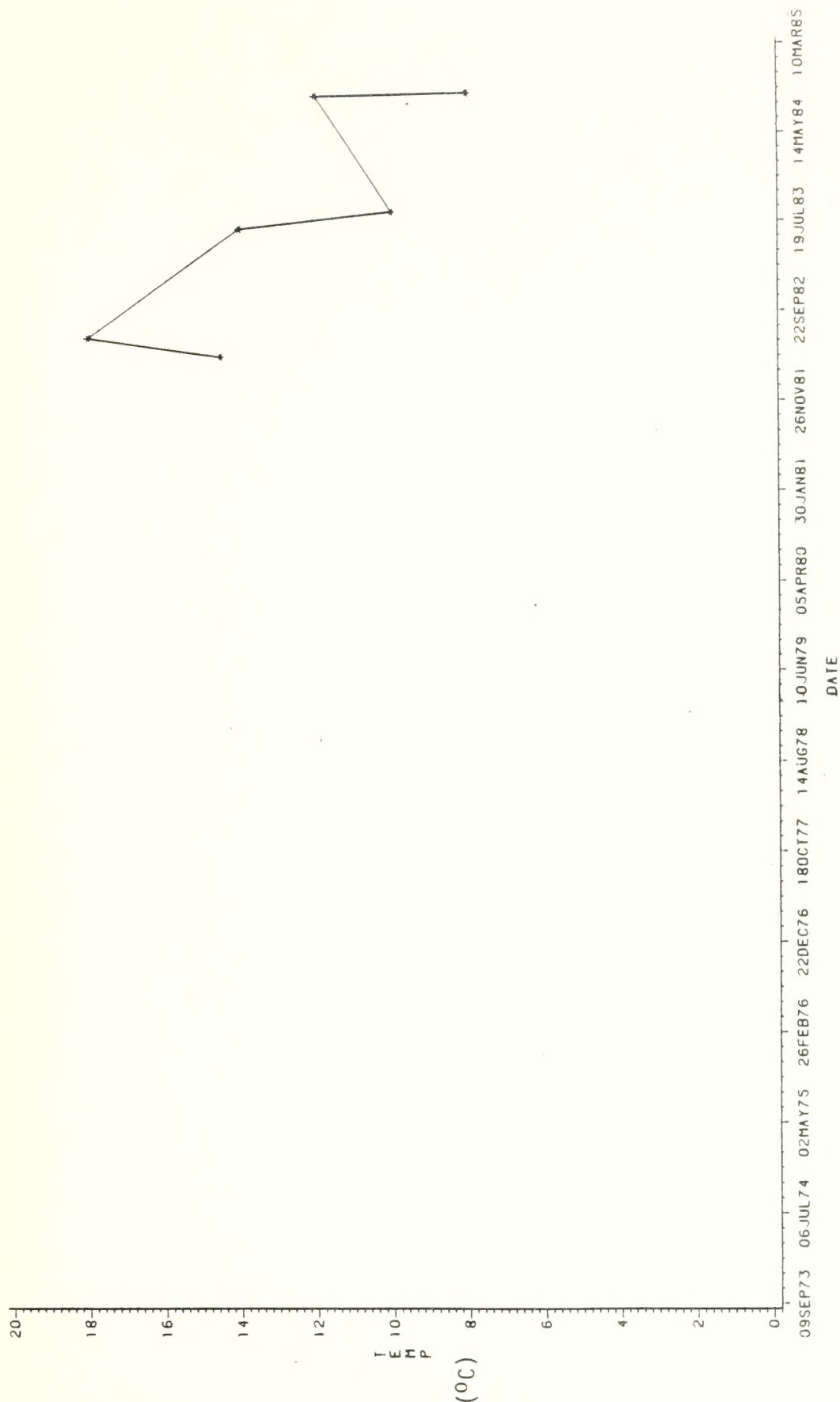
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOG-4536



TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS

LOC=WS66



TIME SERIES PLOT OF FIELD FLUORIDE FOR SPRINGS AND SEEPS

LOC-NS07



06 JUL 74 22 JAN 75 10 AUG 75 26 FEB 76 13 SEP 76 01 APR 77 18 OCT 77 06 MAY 78 22 NOV 78 10 JUN 79 27 DEC 79 14 JUL 80 30 JAN 81 18 AUG 81 06 MAR 82 22 SEP 82 10 APR 83 27 OCT 83 14 MAY 84

DATE

1910

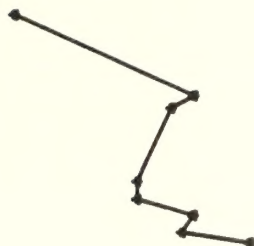
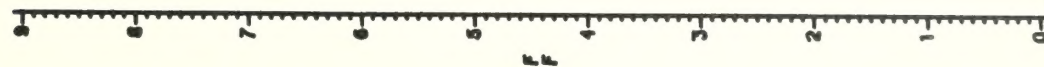
THE HOUSE OF COMMONS HAS PASSED THE BILL FOR THE REGULATION OF THE TRADE IN SUGAR

10 20 30 40 50 60 70 80 90 100

THE HOUSE OF COMMONS HAS PASSED THE BILL FOR THE REGULATION OF THE TRADE IN SUGAR

TIME SERIES PLOT OF FIELD FLUORIDE FOR SPRINGS AND SEEPS
LOC-4612

LOC-WS12



	DATE
06JUL74	22JAN75
10AUG75	26FEB76
13SEP76	01APR77
18OCT77	06MAY78
22NOV78	10JUN79
27DEC79	14JUL80
30JAN81	18AUG81
06MAR82	22SEP82
10APR83	27OCT83
14MAY84	

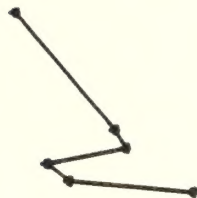
DATE _____

TIME SERIES PLOT OF FIELD FLUORIDE FOR SPRINGS AND SEEPS

LOG-WS13

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06JUL74 22JAN75 10AUG75 26FEB76 13SEP76 01APR77 18OCT77 06MAY78 22NOV78 10JUN79 27DEC79 14JUL80 30JAN81 18AUG81 06MAR82 22SEP82 10APR83 27OCT83 14MAY84

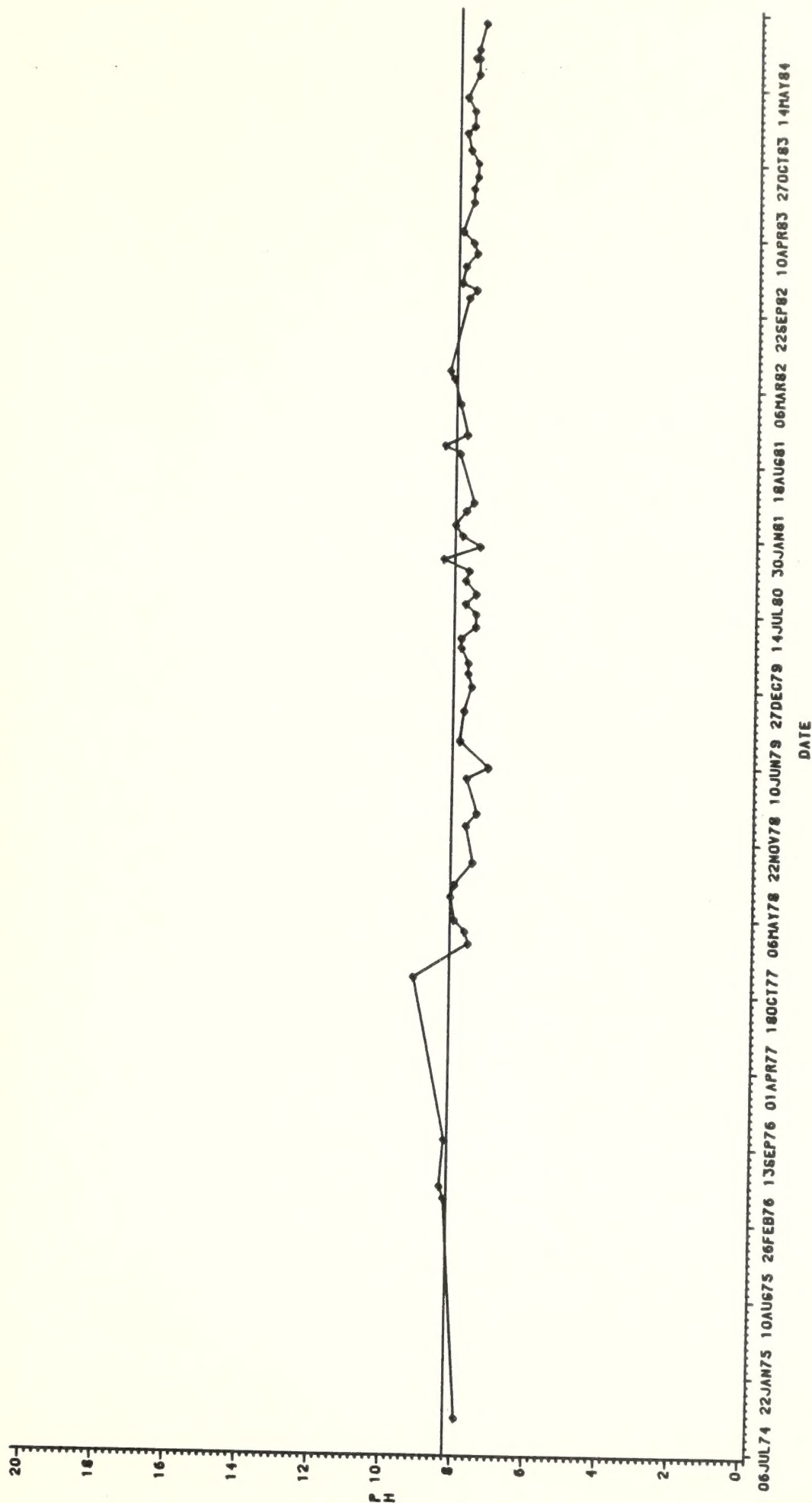
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TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS

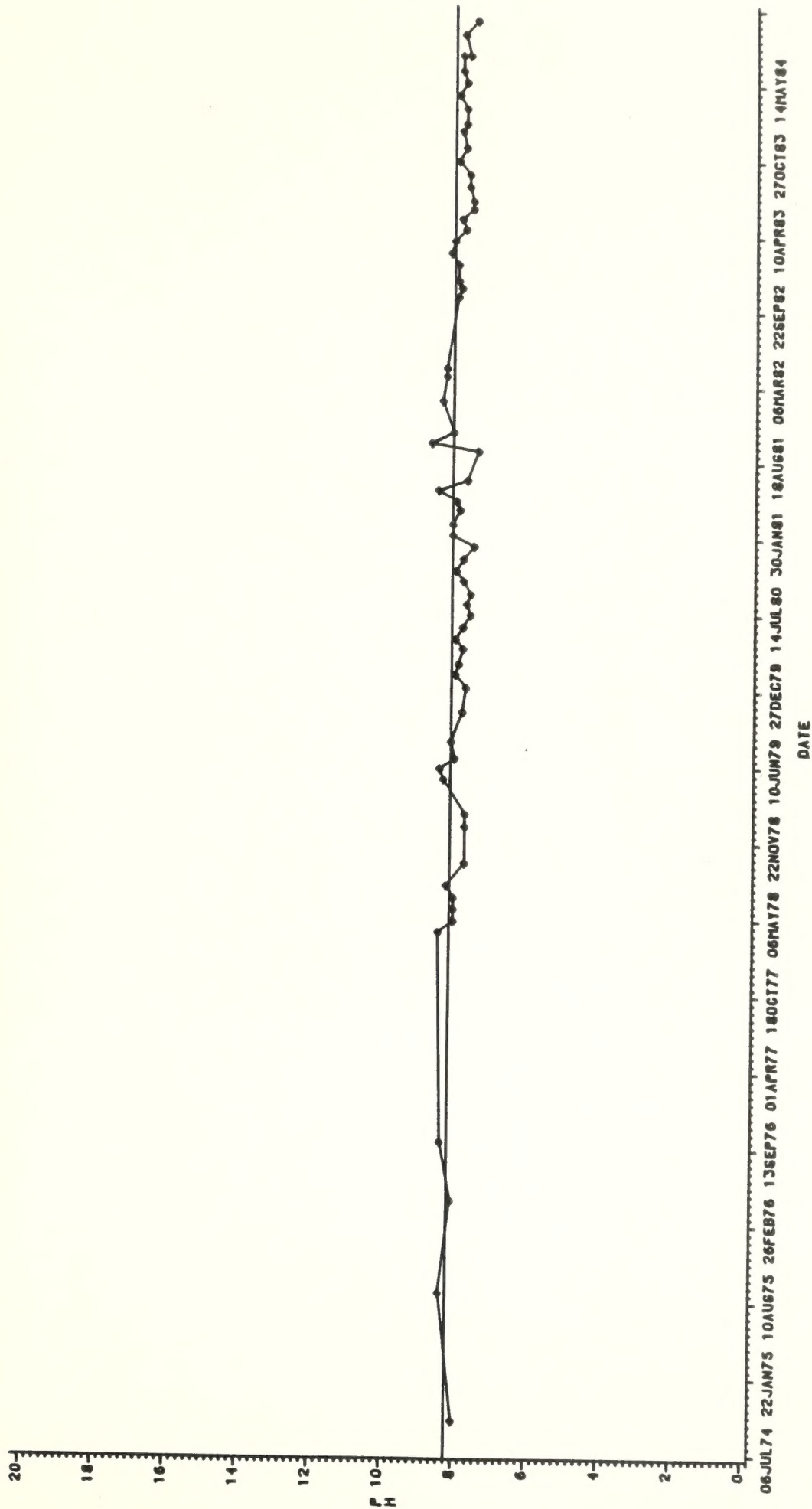
LOC-WS01



--- (BASELINE MEAN 8.2 UNITS)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS

LOC-V602



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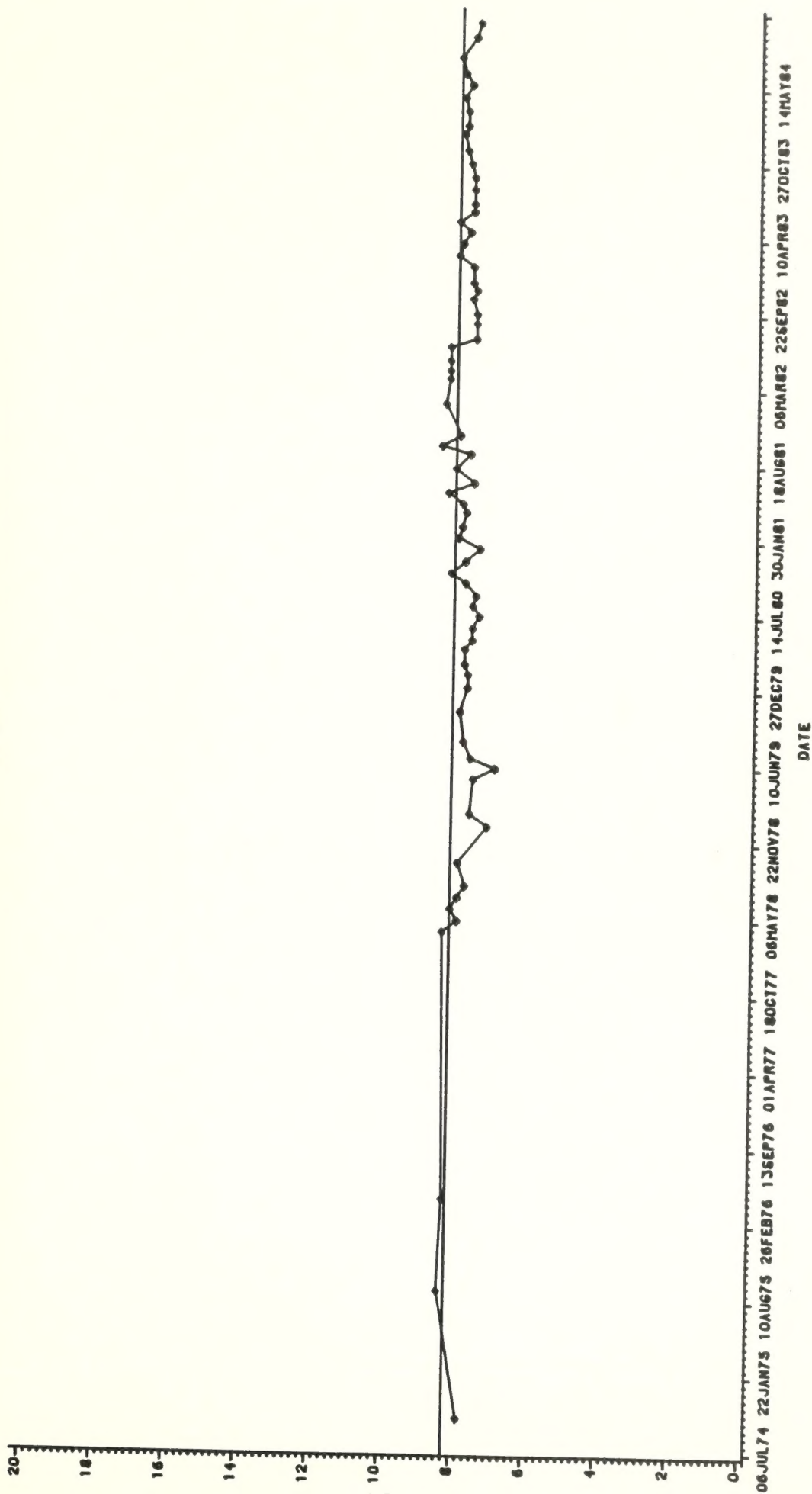
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TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS

LOG-WS04



---- (BASELINE MEAN 8.2 UNITS)

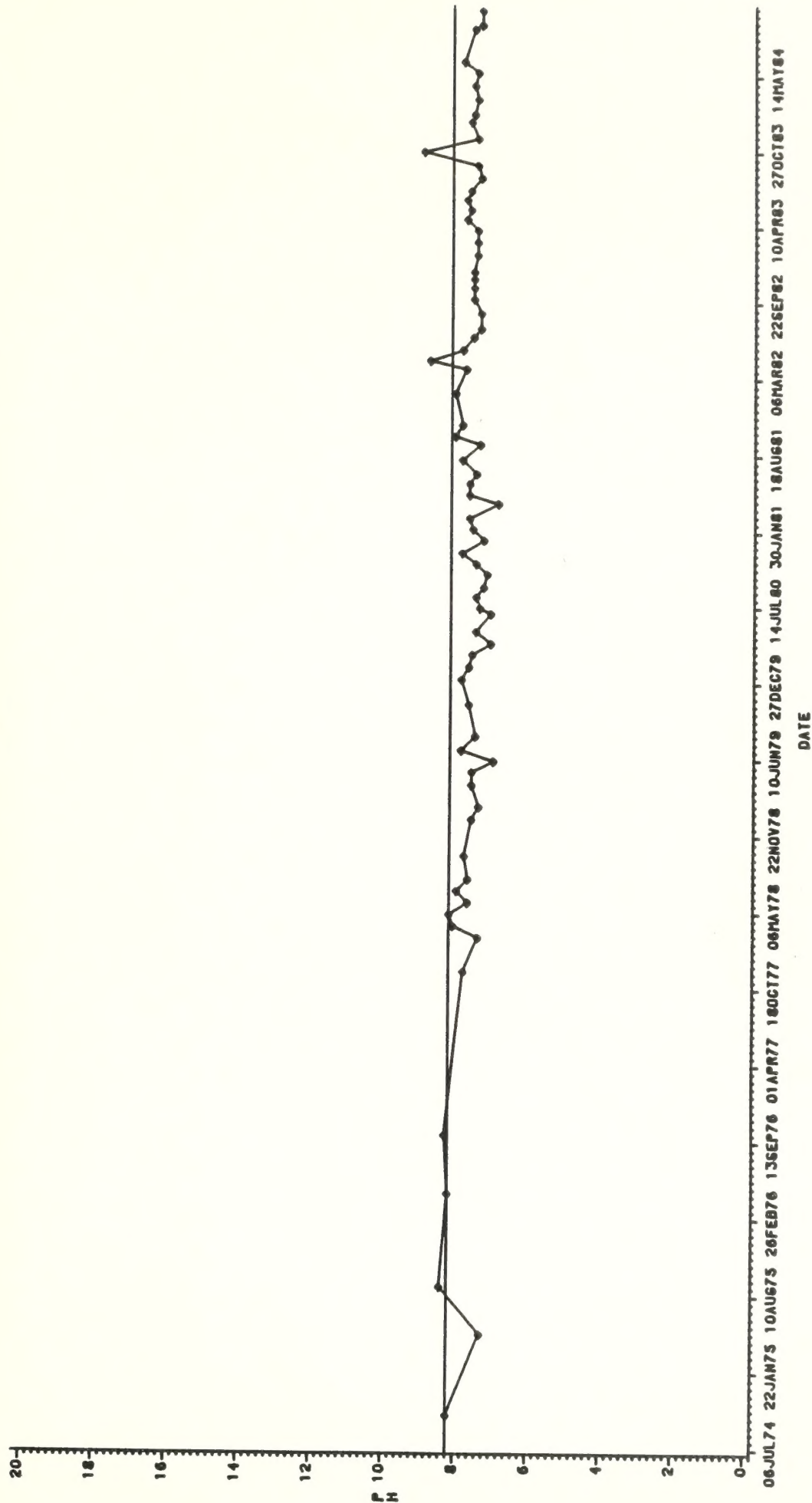
2012

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RECORDING UNIT 100

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOC-WS06



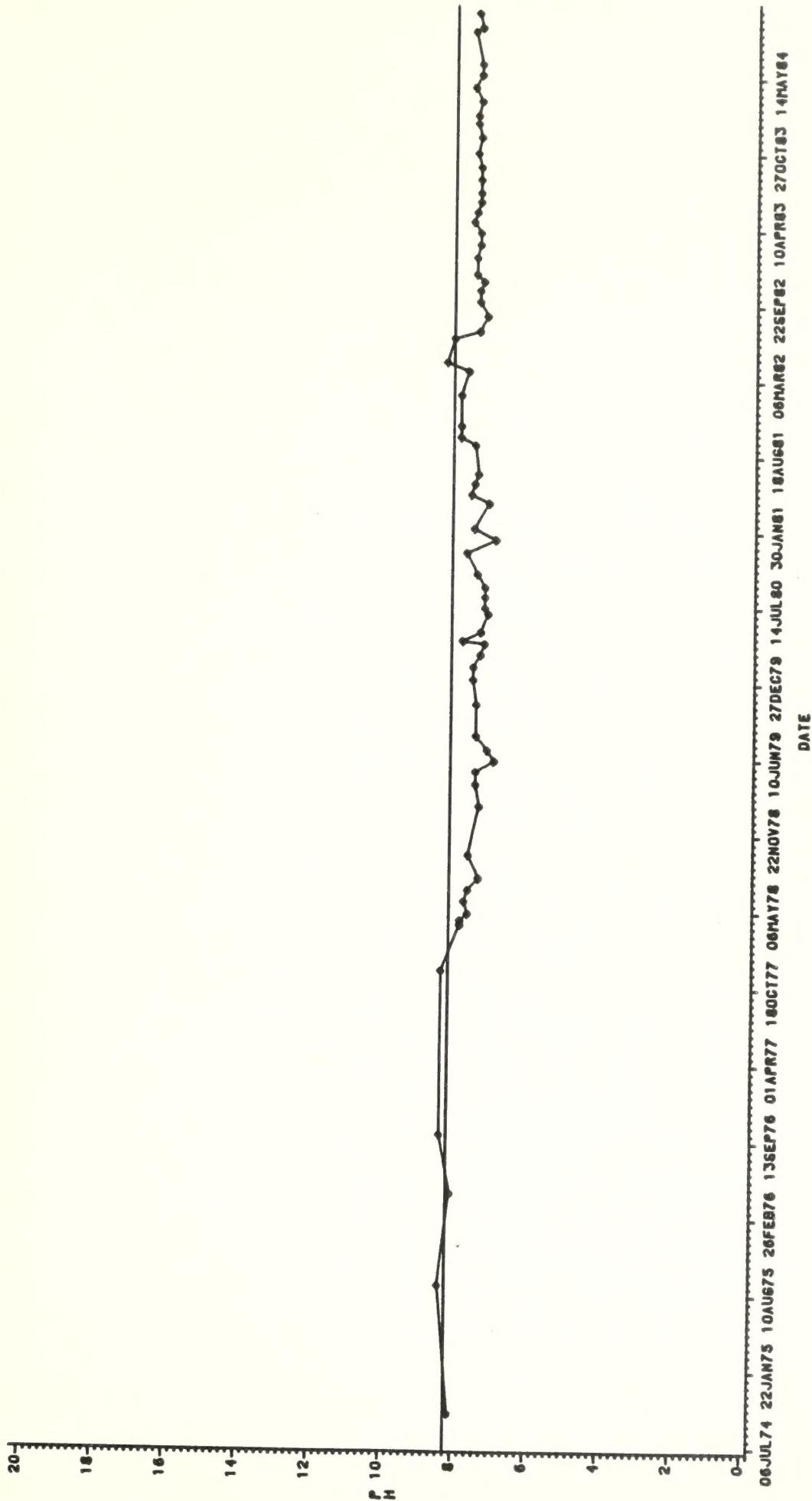
1114



1076 2111111 1701 01 11 101 211111 2101

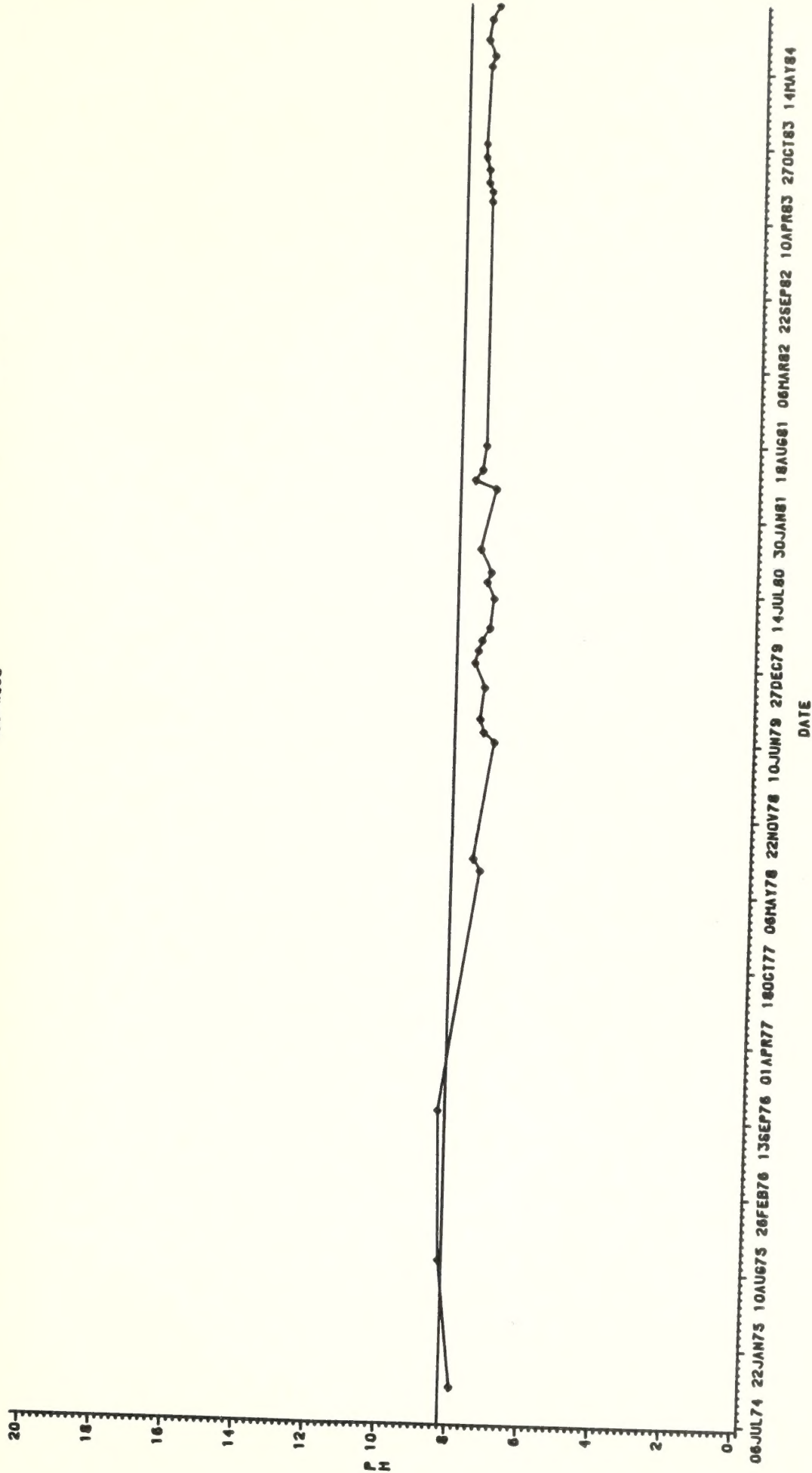
TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS

LOC-W607



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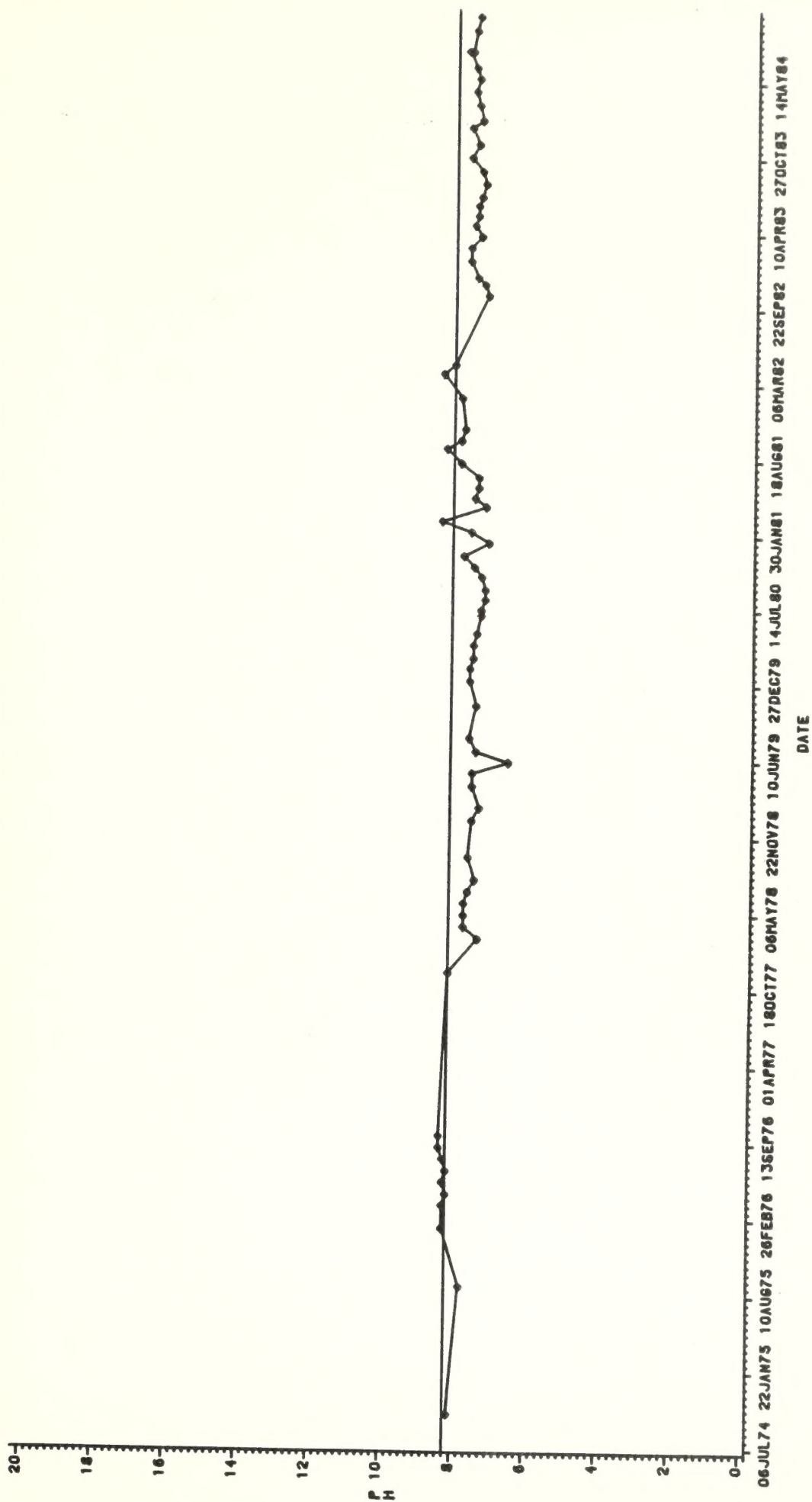
TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOC-4608



--- (BASELINE MEAN 8.2 UNITS)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS

LOC-V509



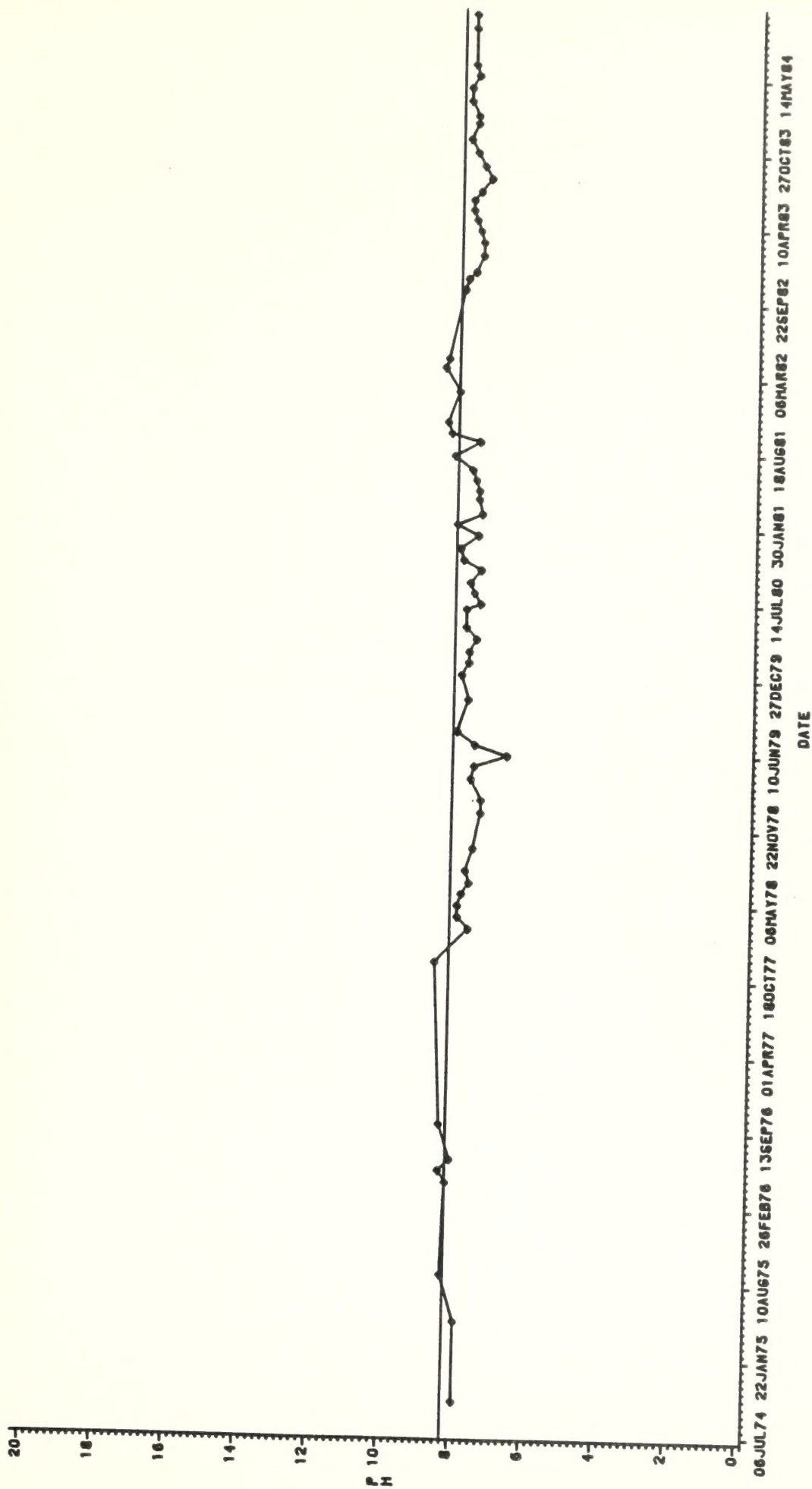
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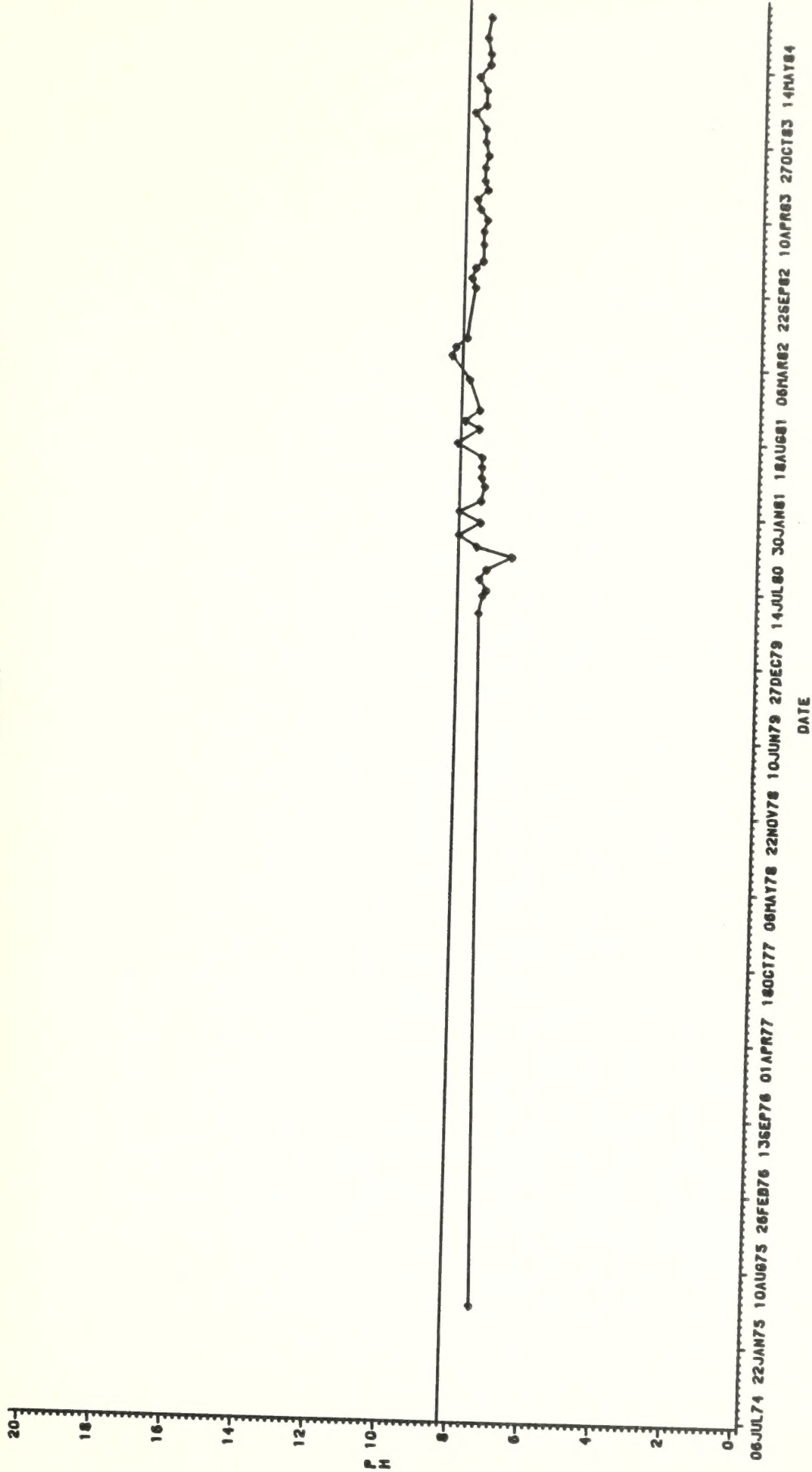
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TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOG-M610



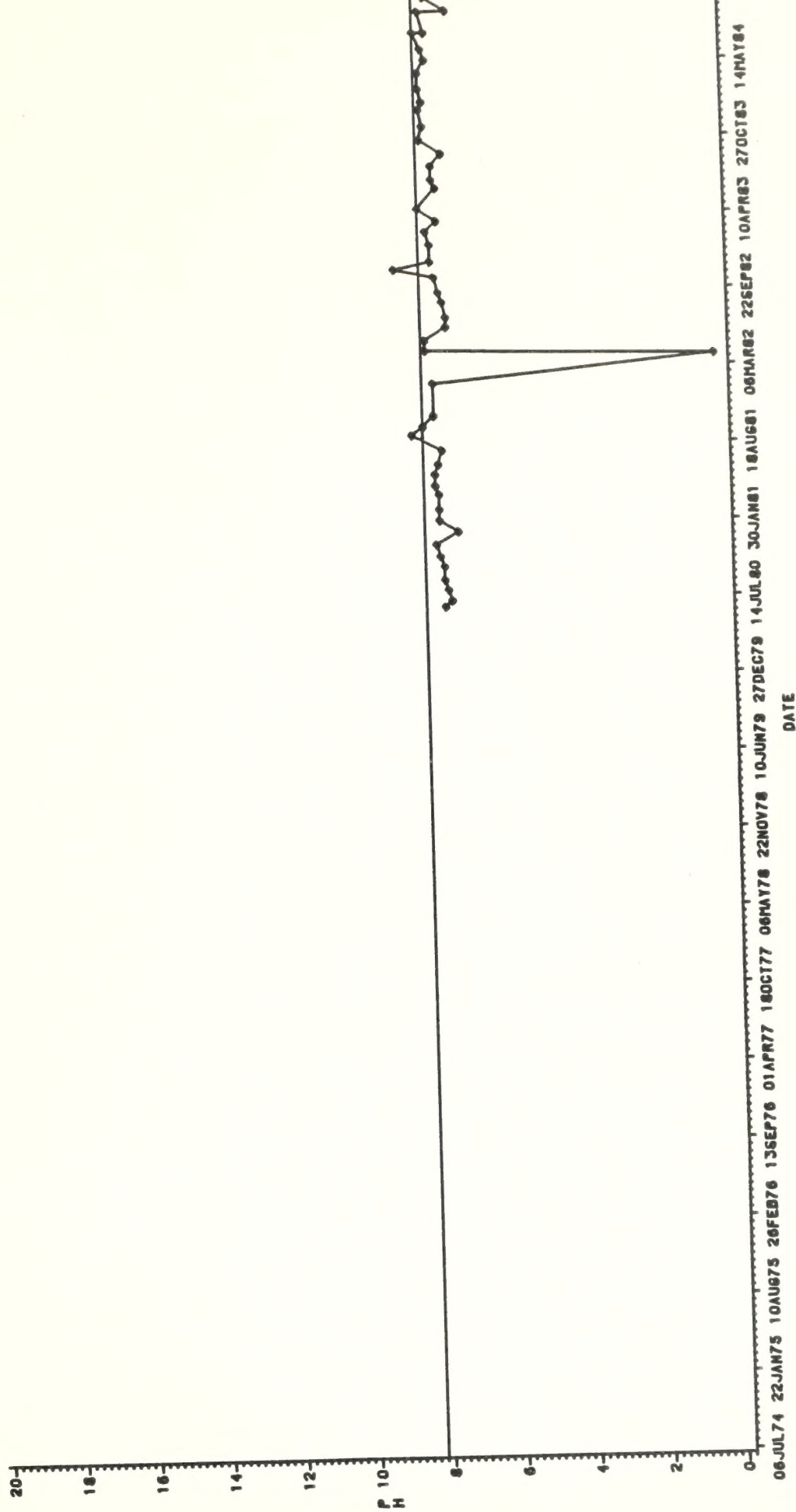
--- (BASELINE MEAN 8.2 UNITS)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOC-4611



--- (BASELINE MEAN 8.2 UNITS)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOC-WS12



--- (BASELINE MEAN 8.2 UNITS)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS

LOG-WS13

20
18
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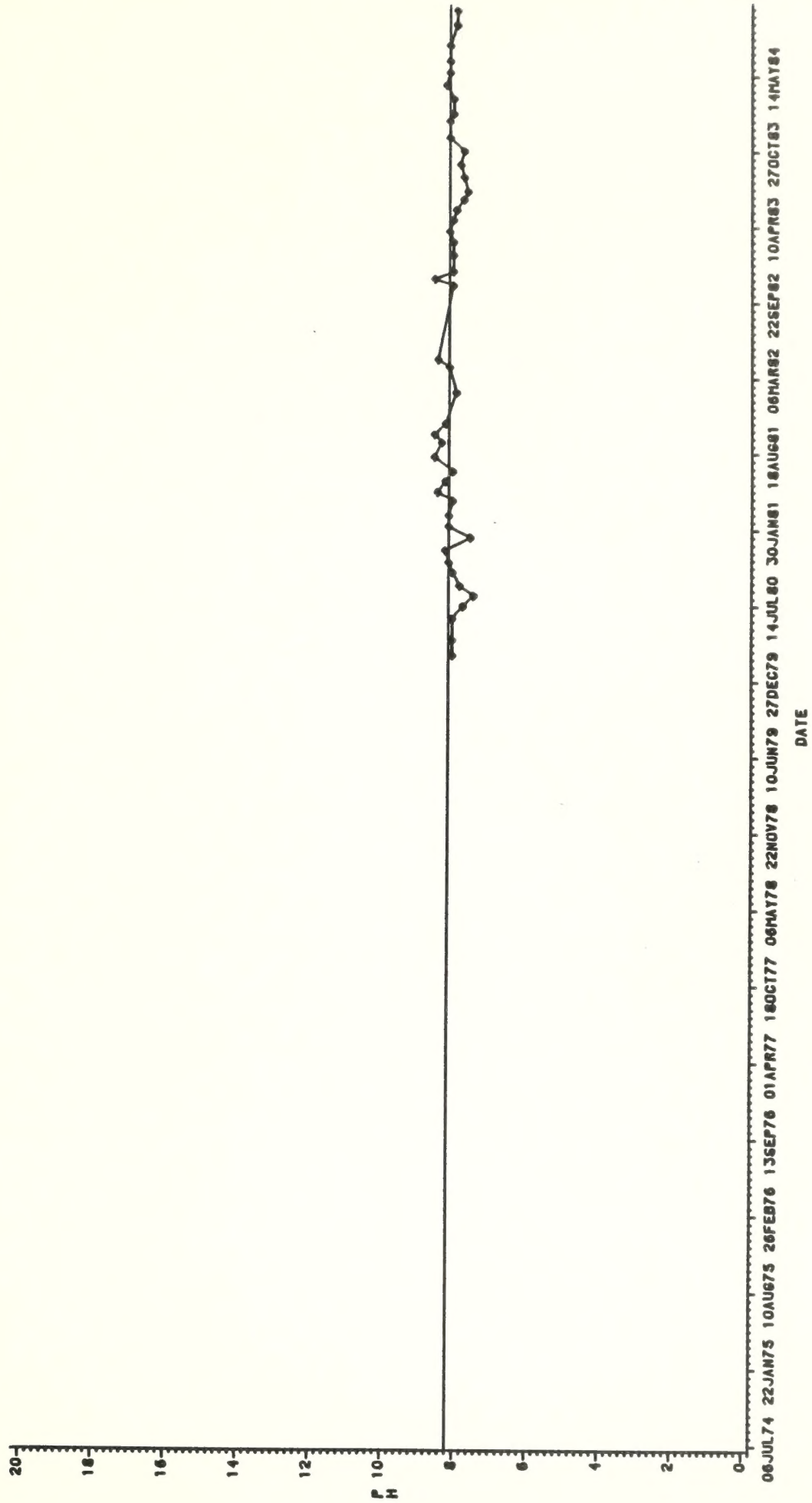
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06JUL74 22JAN75 10AUG75 26FEB76 13SEP76 01APR77 18OCT77 06MAY78 22NOV78 10JUN79 27DEC79 14JUL80 30JAN81 18AUG81 06MAR82 22SEP82 10APR83 27OCT83 14MAY84

DATE

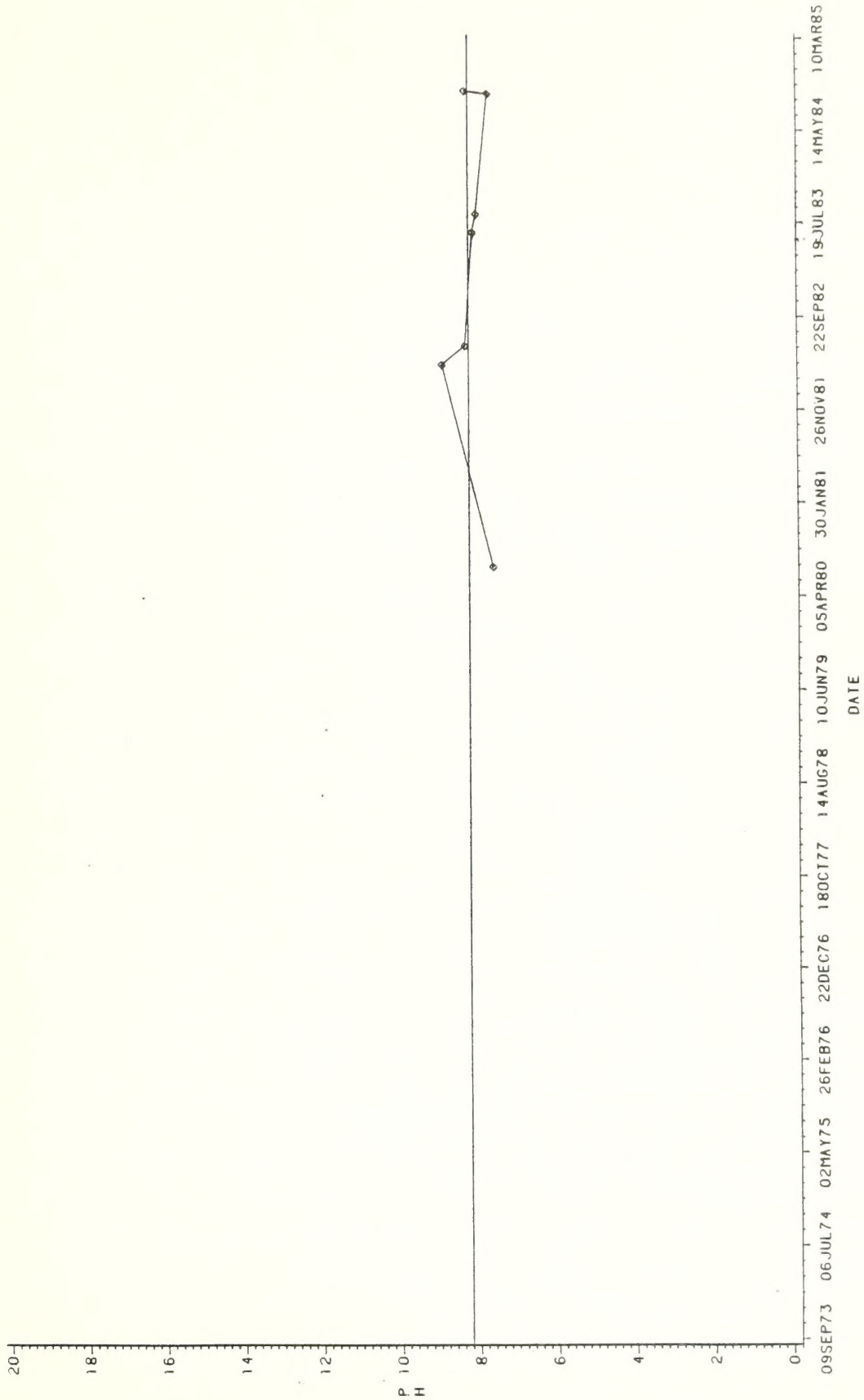
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TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOC-WS36



--- (BASELINE MEAN 8.2 UNITS)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS LOC=MS66



--- (BASELINE MEAN 8.2 UNITS)

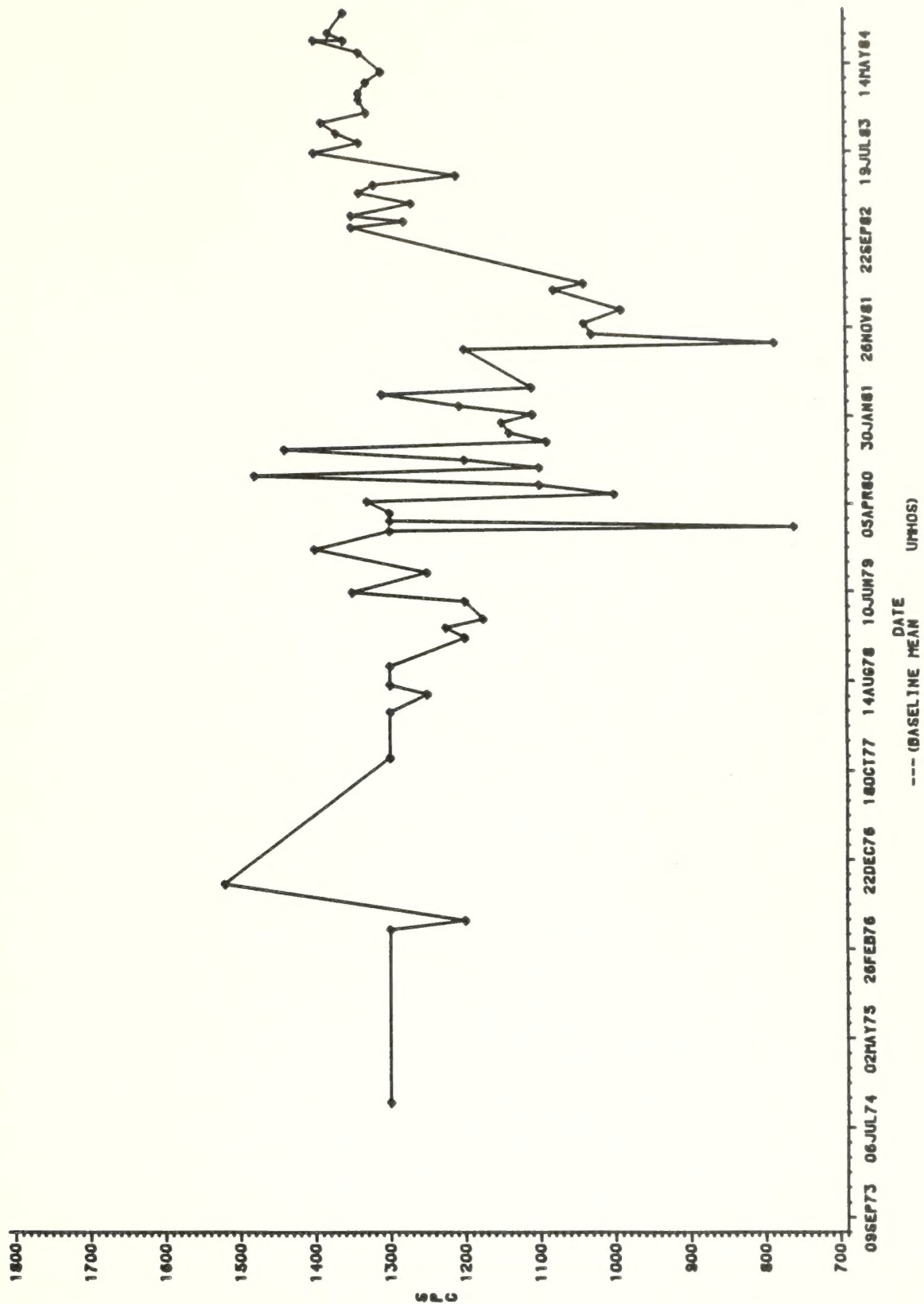
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2017年11月

TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

LOC=V601



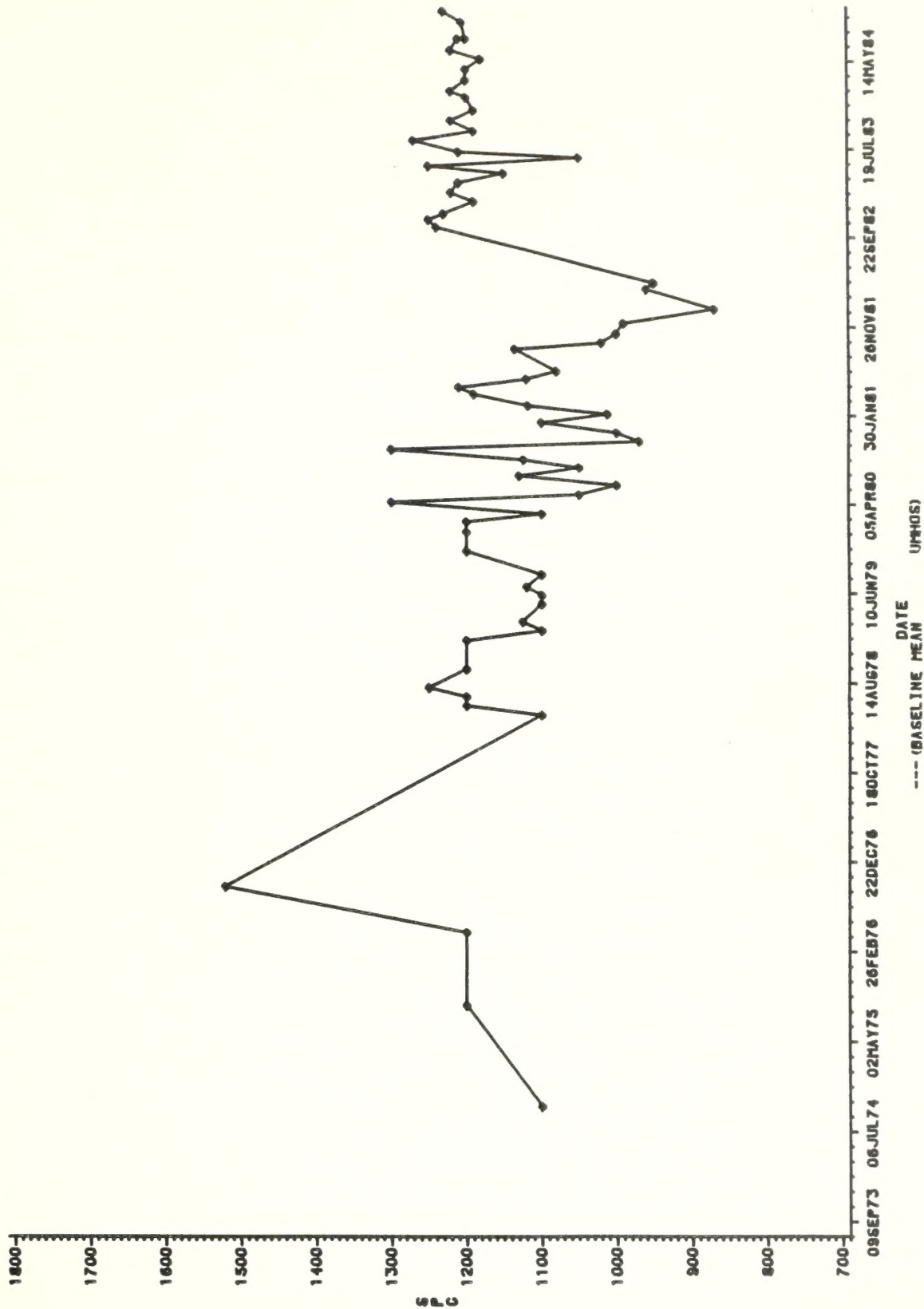
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TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

LOC-4602



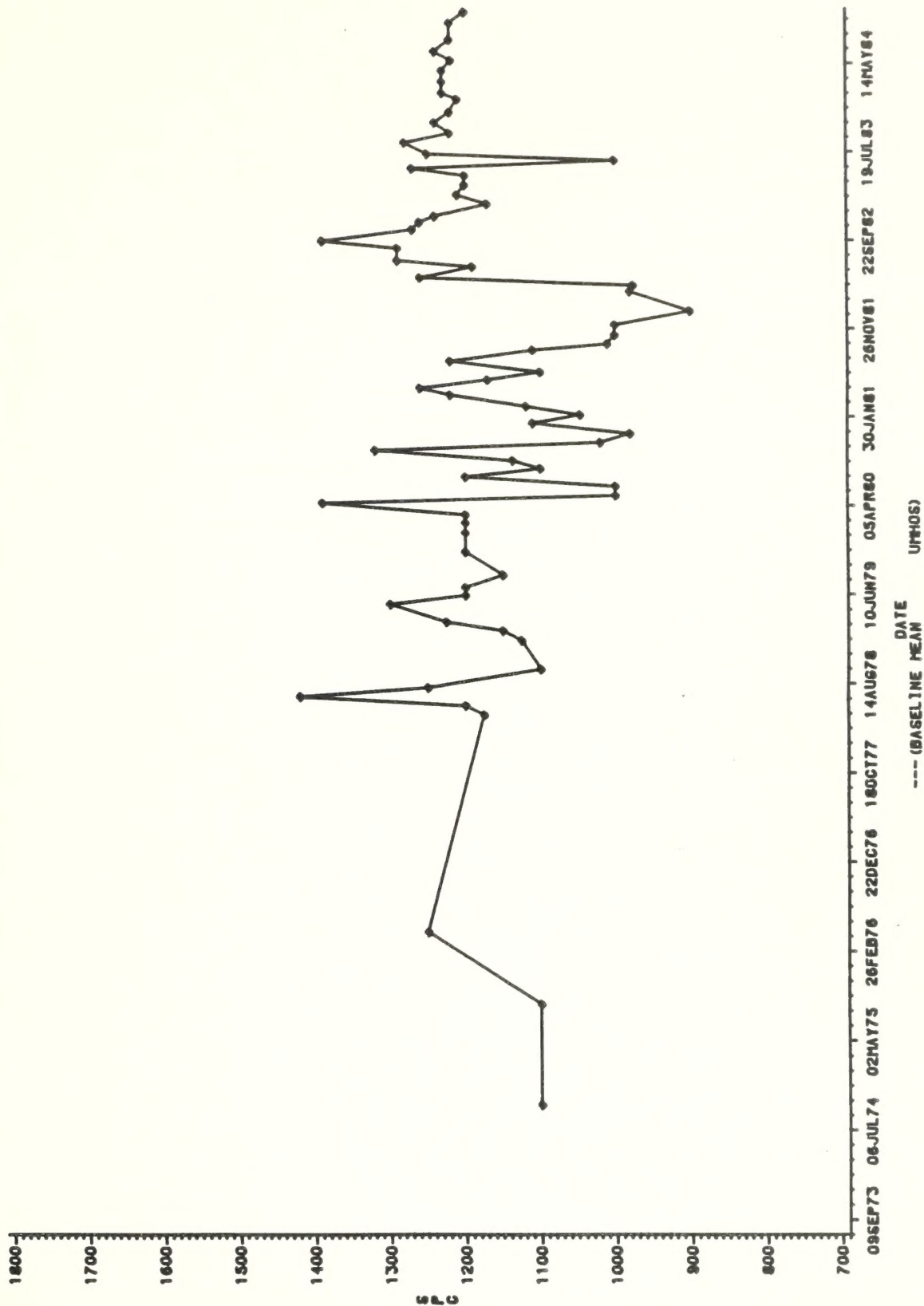
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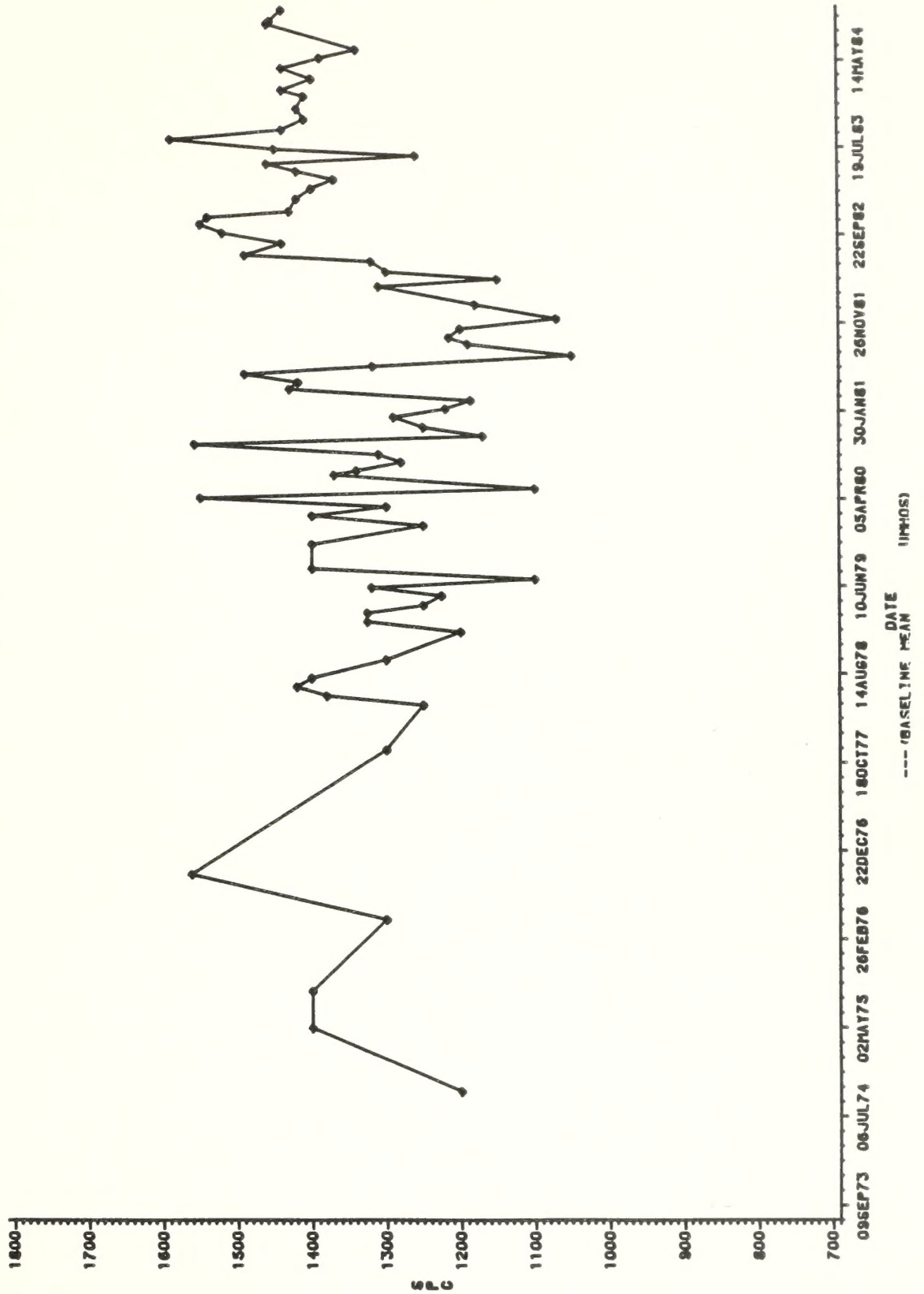
TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

LOC-MS04



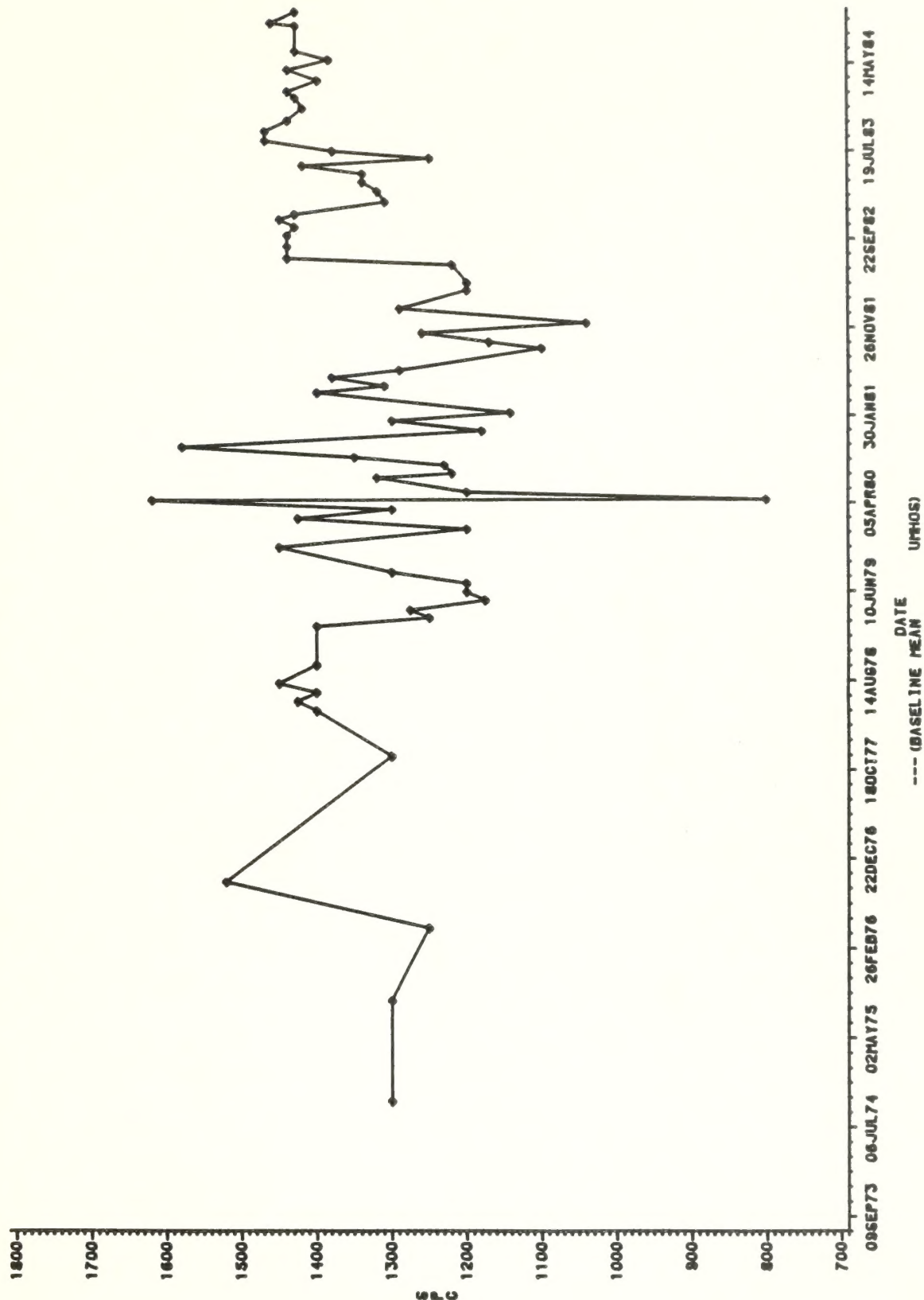
TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

LOC-V606

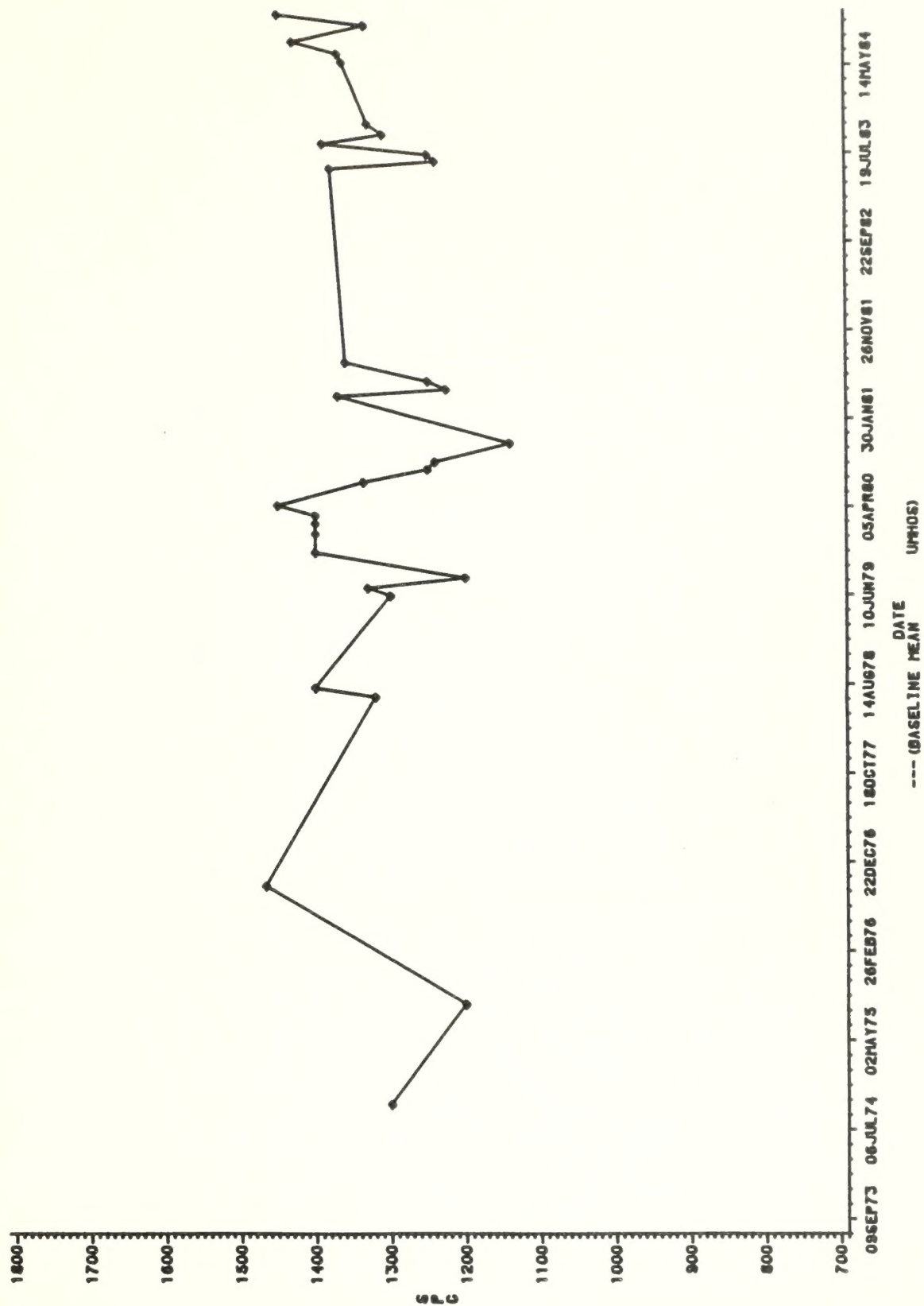


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

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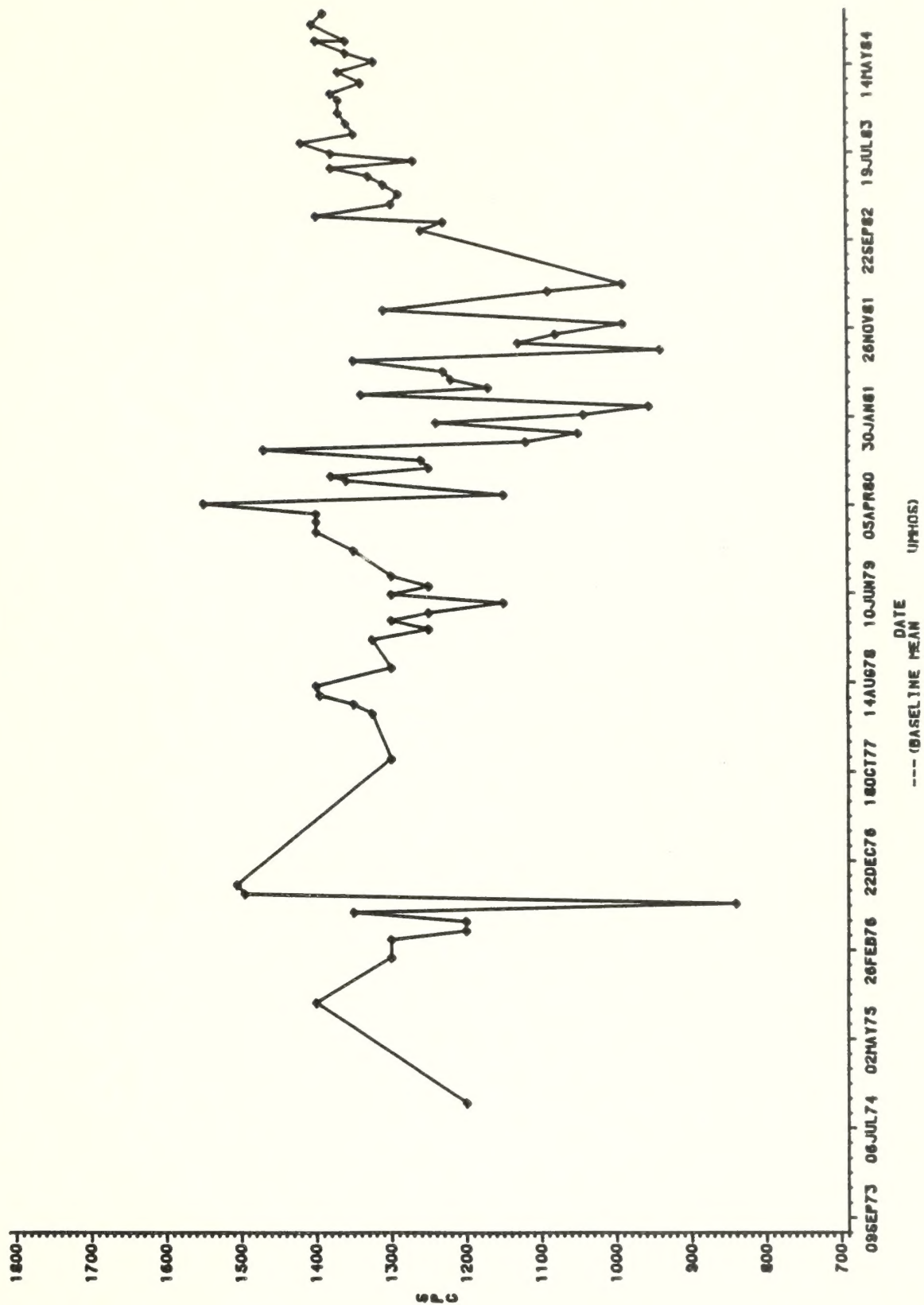


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS LOC-4608

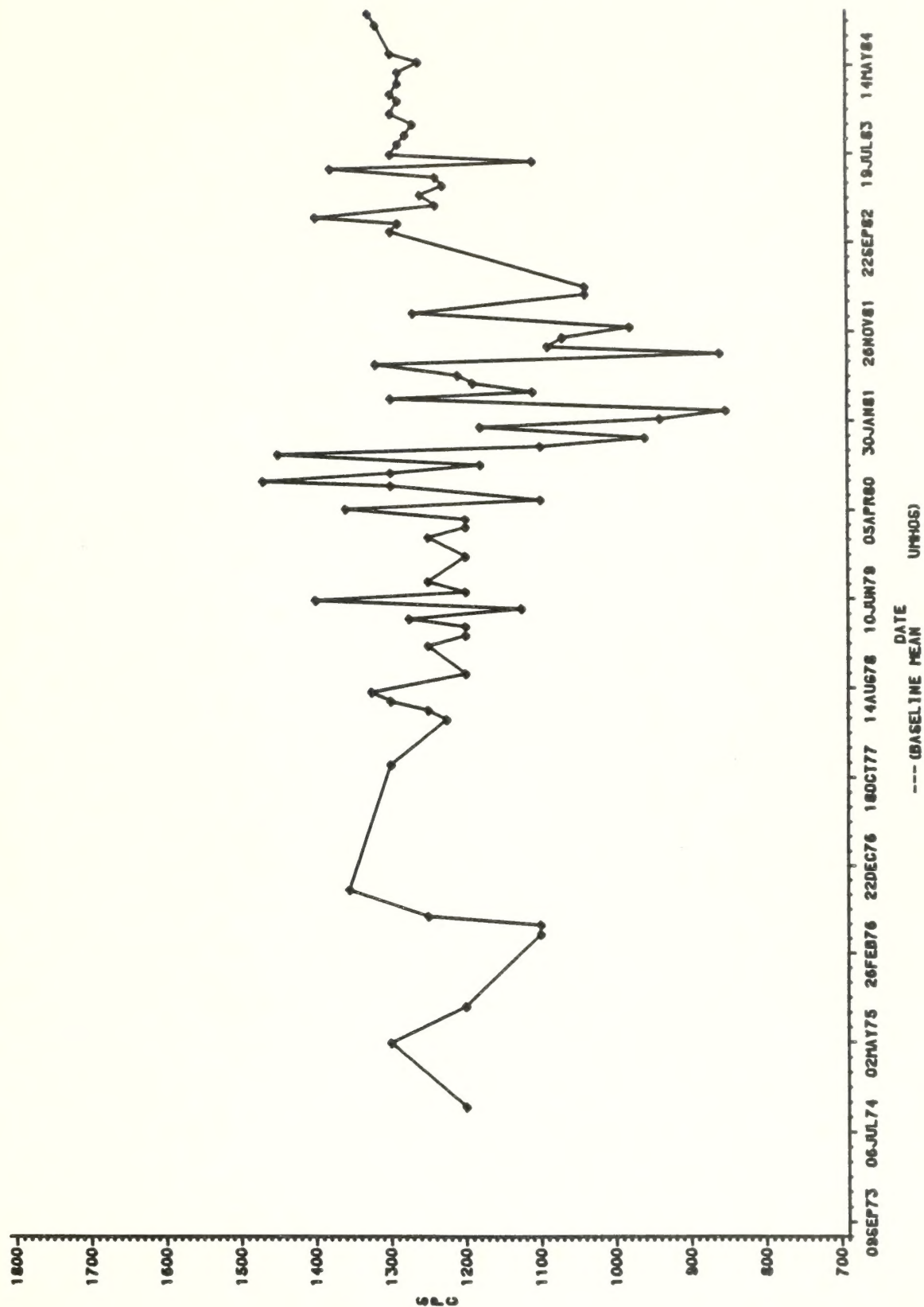


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

LOC-WS09

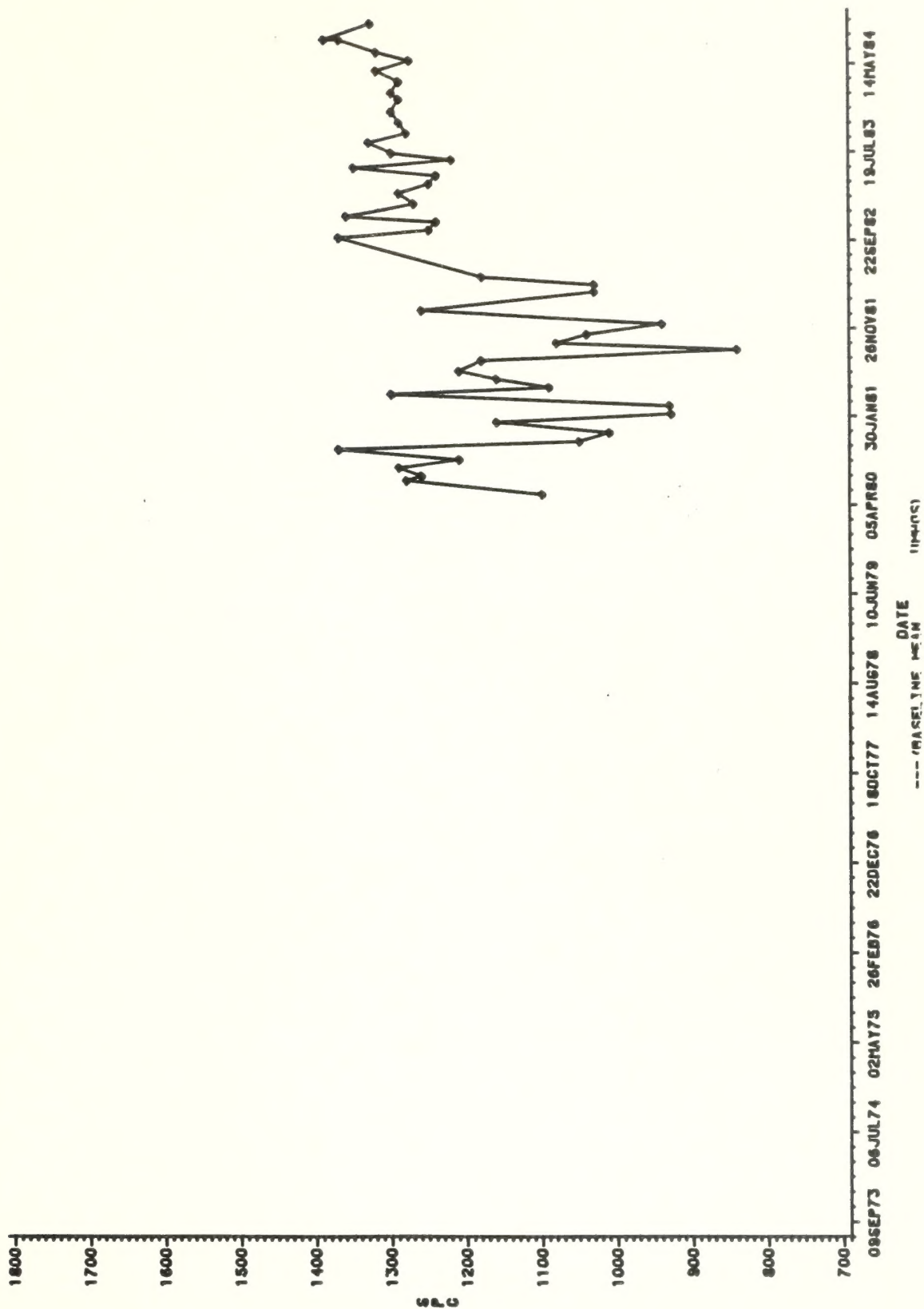


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS LOC-4510



TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

LOG-WS11



272

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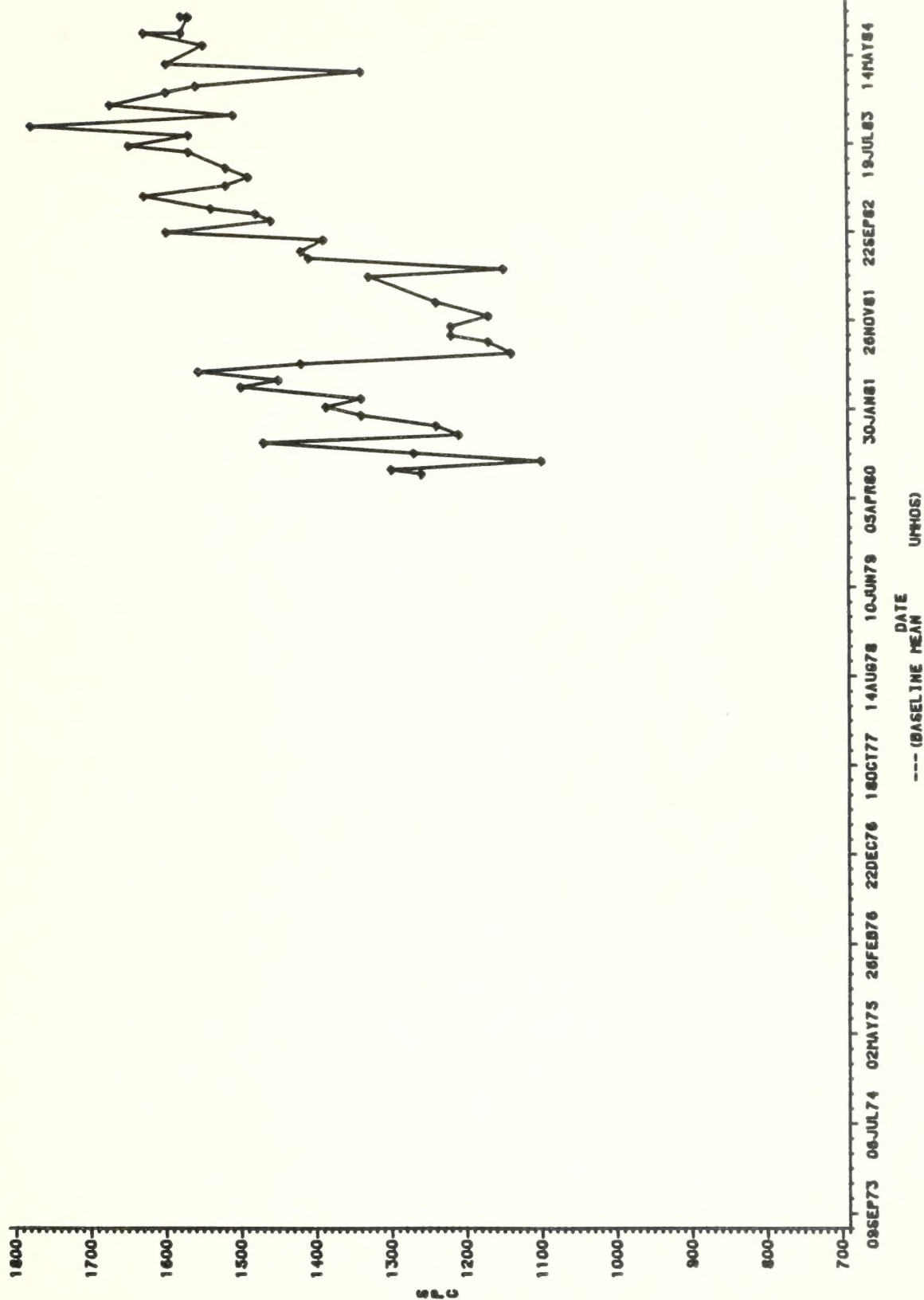
1000 900 800 700 600 500 400 300 200 100 0



1000 900 800 700 600 500 400 300 200 100 0

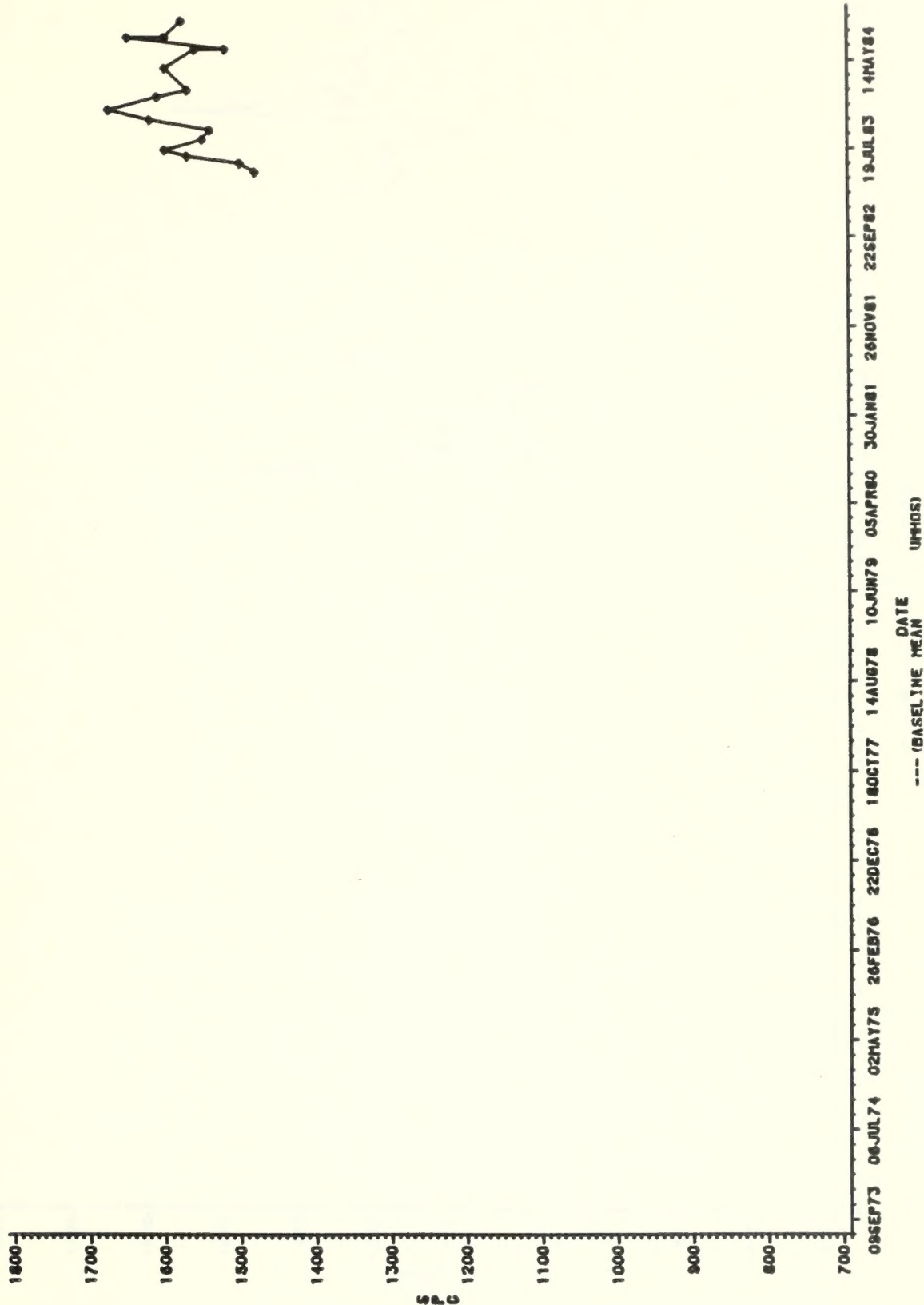
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LOC-4512

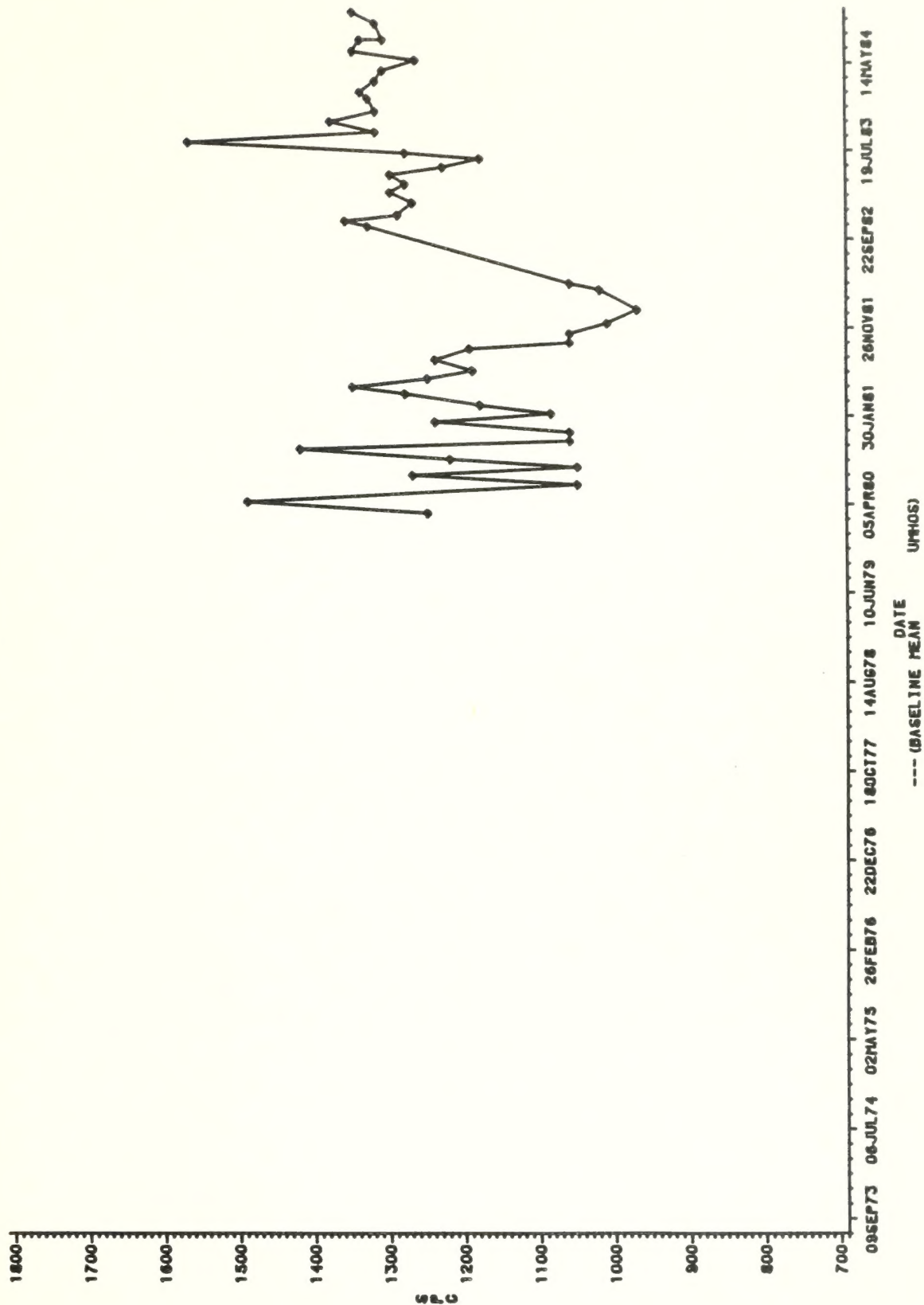


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS

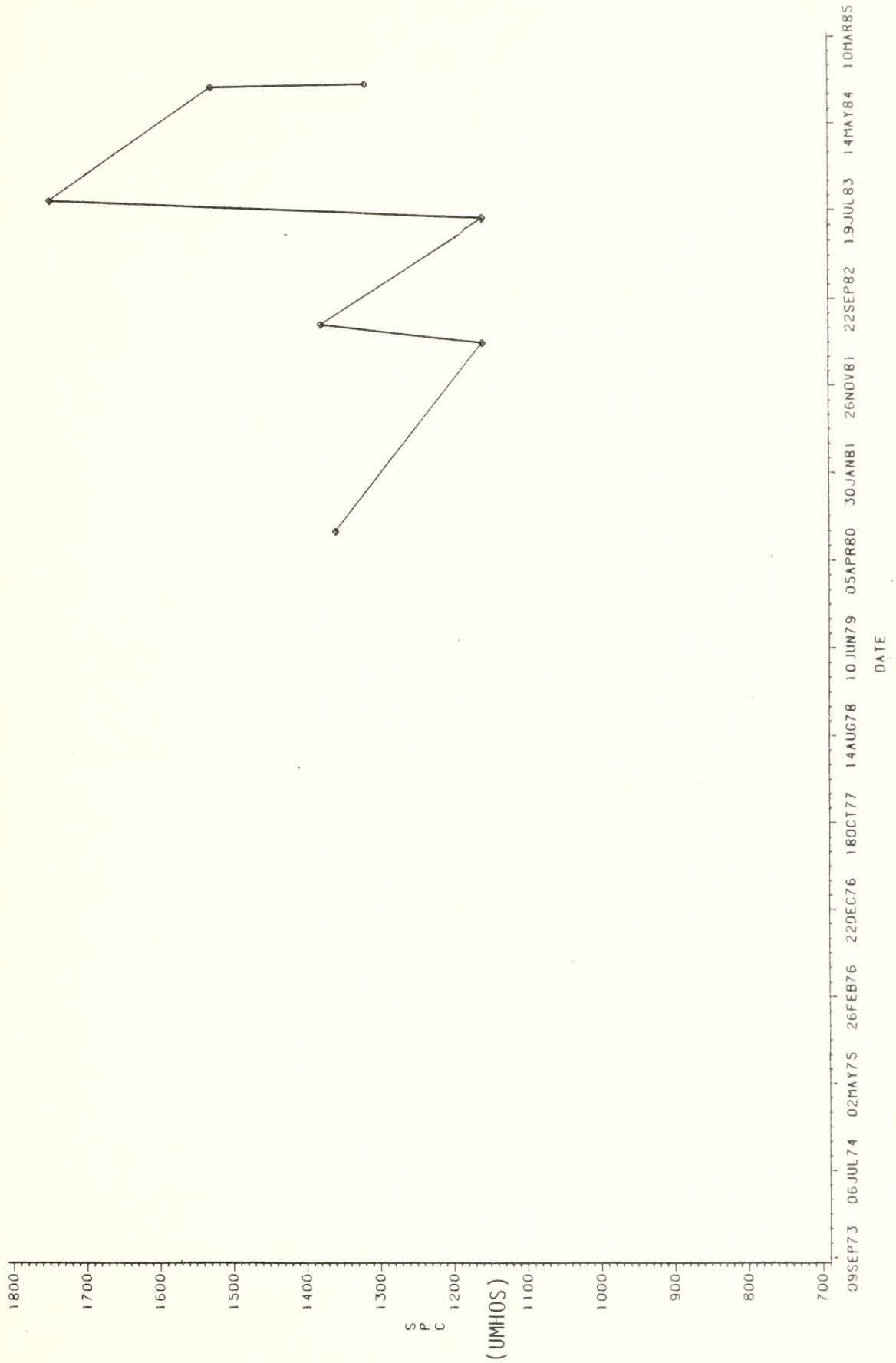
LOC-W513



TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS LOC-WS36



TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS LOC=WS66



1.2.2.3 Alluvial Wells

Three new alluvial wells were drilled in early 1984 adjacent to S-102 (WA21*, WA22, WA24). A quarterly water quality sample was taken in June 1984 as shown in Table 1.2.2.3-2.

During this report period water samples of pH and conductivity remained between the 20% range for these baseline values. Field measurement data for this reporting period are shown in the flow section 1.2.1.3, Table 1.2.1.3-1. If a sample should have to be taken, parameters would be analyzed following the DMP quarterly schedule, Table 1.2.2.3-1.

TABLE 1.2.2.3-1

Parameters Analyzed During IMP - Alluvials

Ag	Mn	Zn	Oil and Grease
As	Pb	Na	Kjeldahl N
Ba	Mo	K	COD
Cd	Cl	Ca	Phenols
Cr	Li	Mg	TDS
Cu	Al	Fluoride	SO ₄
Fe	Sr	B	CO ₃
Hg	Se	Ni	HCO ₃
Alkalinity	Hardness	Ammonia	No

Time series plots of temperature, pH and specific conductance are presented in this section of alluvial wells sampled since baseline; see Table 1.2.2.3-3.

* WB21 is a second alluvial string in the same well.

TABLE 1.2.2.3-2

CR-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
ALLUVIAL WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHEN (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)		SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WA21	84	6	.060	-1.00	-10.0	-.0100	1.4	.30	890.0		2.2	67.0	16.0	-50.0	-.020	-.020
WA22	84	6	.040	-1.00	-10.0	-.0100	1.3	.20	820.0		2.5	35.0	14.0	-50.0	-.020	-.020
WA24	84	6	.050	-1.00	-10.0	-.0100	1.2	.30	830.0		2.9	60.0	13.0	-50.0	-.020	-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.3-2 (Cont'd)

CH-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
ALLUVIAL WELLS

WELL	YR	MO	SI02 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PH (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WA21	84	6	20.0		.10	-.10	-.00020	-.010		.018	-.020	-.05	.057	-.02	3.40
WA22	84	6	17.0		.10	-.10	-.00020	-.010		.009	-.020	-.05	.097	.05	.70
WA24	84	6	19.0		.20	-.10	-.00020	-.010		.018	-.020	-.05	.010	.03	.86

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.3-2 (Cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
ALLUVIAL WELLS

WELL	YR	MO	TOTAL ALK (MG/L)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HC03 (MG/L)	CO3 (MG/L)	BR (MG/L)	HARDNESS (MG/L)	NA (MG/L)	MG (MG/L)	CA (MG/L)
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WA21	84	6	700.0	-.100	-.040	-.020	-.50	650.0	1.0	.430	400.0	250.0	57.0	63.0
WA22	84	6	530.0	-.100	-.040	-.020	-.50	490.0	1.0	.570	500.0	180.0	72.0	78.0
WA24	84	6	630.0	-.100	-.040	-.020	-.50	590.0	1.0	.490	410.0	220.0	60.0	64.0

NOTE: - INDICATES LESS THAN

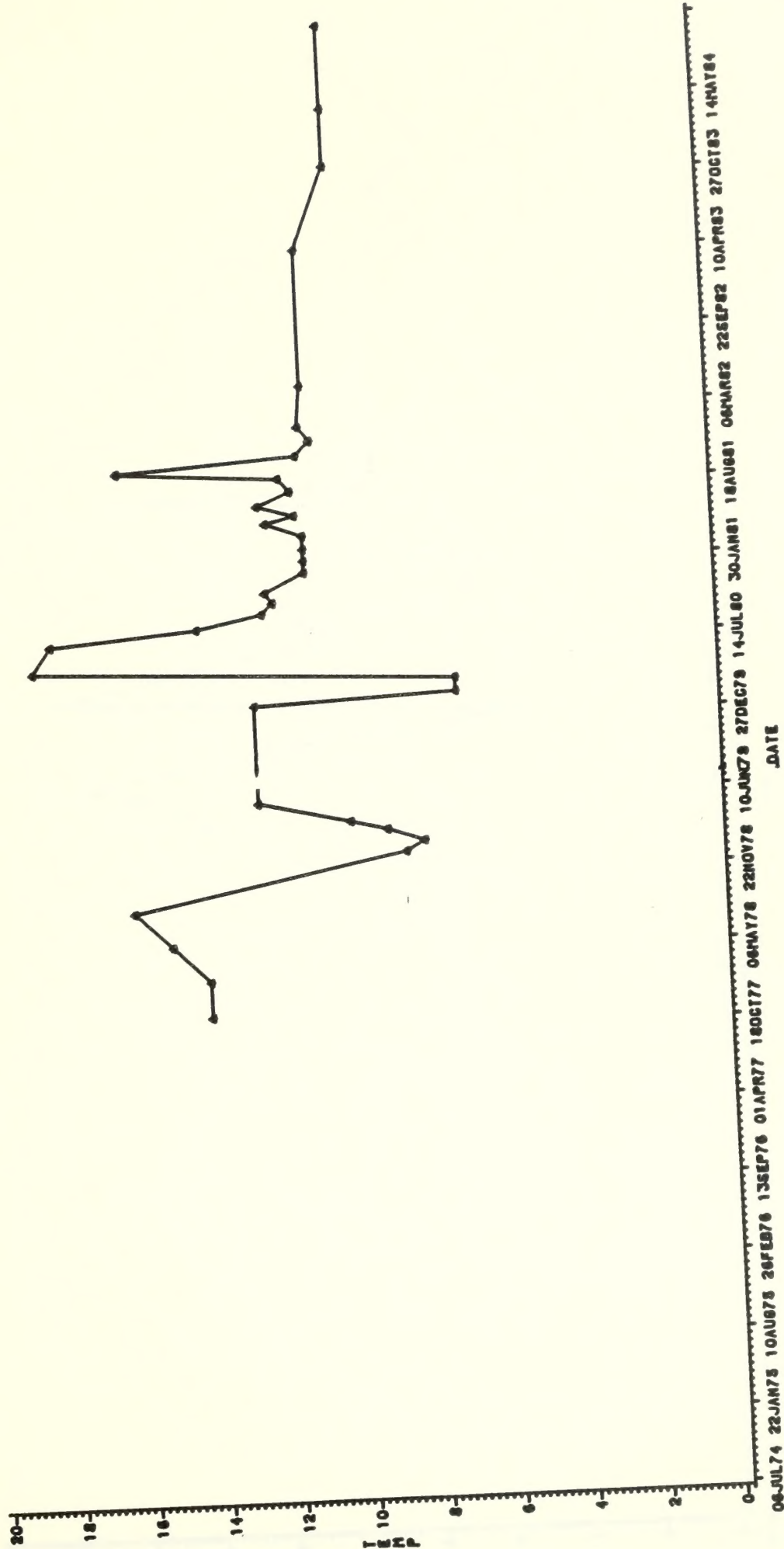
TABLE 1.2.2.3-3

<u>Station</u>	<u>Code</u>	<u>Temperature</u>	<u>pH</u>	<u>Specific Conductance</u>
A-1	WA01	I-356	I-369	I-382
A-2	WA02	I-357	I-370	I-383
A-3	WA03	I-358	I-371	I-384
A-5	WA05	I-359	I-372	I-385
A-6	WA06	I-360	I-373	I-386
A-7	WA07	I-361	I-374	I-387
A-8	WA08	I-362	I-375	I-388
A-9	WA09	I-363	I-376	I-389
A-10	WA10	I-364	I-377	I-390
A-11	WA11	I-365	I-378	I-391
A-12	WA12	I-366	I-379	I-392
A-5A	WA55	I-367	I-380	I-393
A-5B	WA56	I-368	I-381	I-394

TABLE 1.1-1.1-1

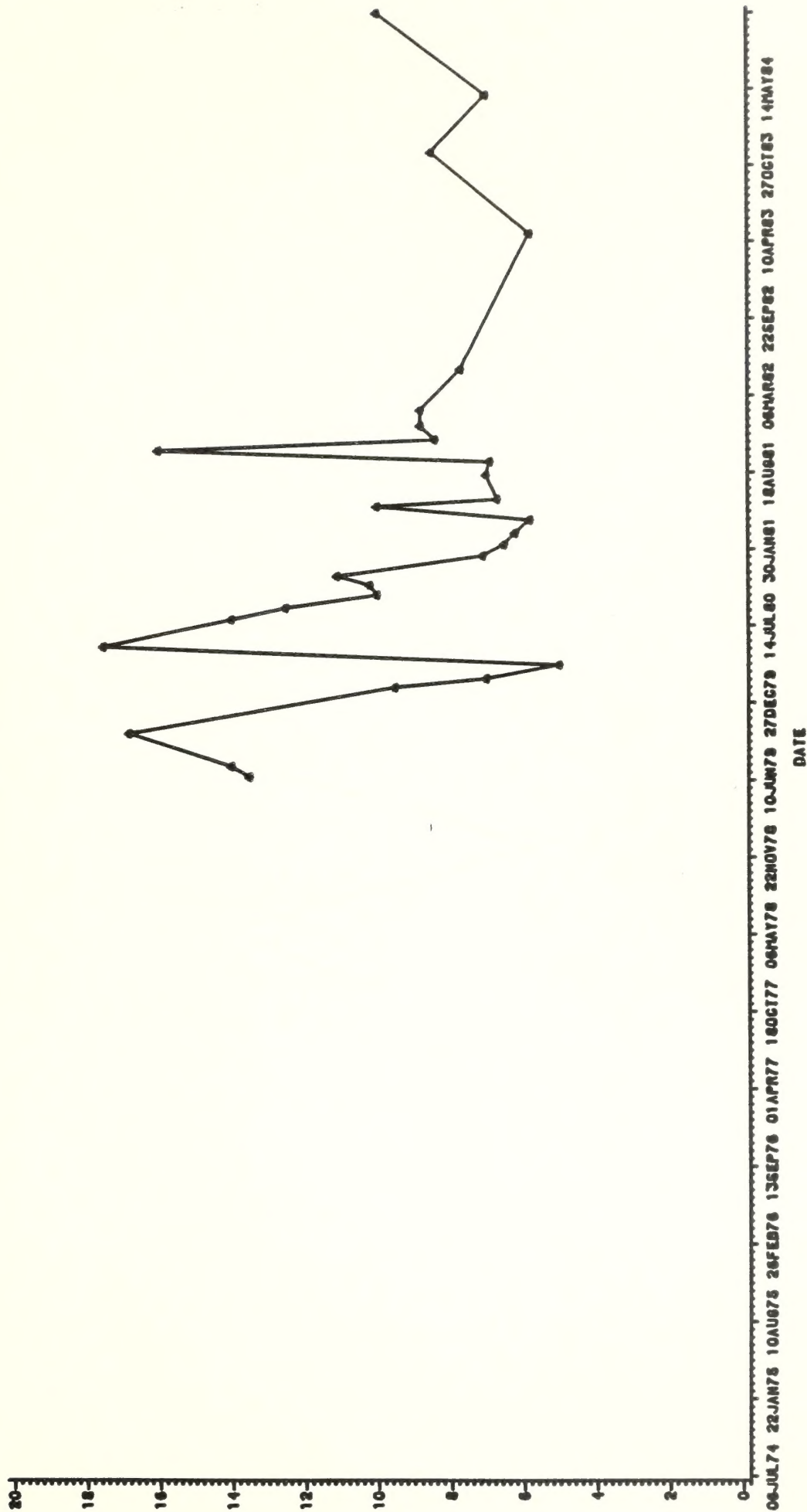
Temperature	Time	Concentration	Rate
100°C	10 min	1.00	1.00
100°C	20 min	0.95	0.95
100°C	30 min	0.90	0.90
100°C	40 min	0.85	0.85
100°C	50 min	0.80	0.80
100°C	60 min	0.75	0.75
100°C	70 min	0.70	0.70
100°C	80 min	0.65	0.65
100°C	90 min	0.60	0.60
100°C	100 min	0.55	0.55
100°C	110 min	0.50	0.50
100°C	120 min	0.45	0.45
100°C	130 min	0.40	0.40
100°C	140 min	0.35	0.35
100°C	150 min	0.30	0.30
100°C	160 min	0.25	0.25
100°C	170 min	0.20	0.20
100°C	180 min	0.15	0.15
100°C	190 min	0.10	0.10
100°C	200 min	0.05	0.05

FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS LOG-4401



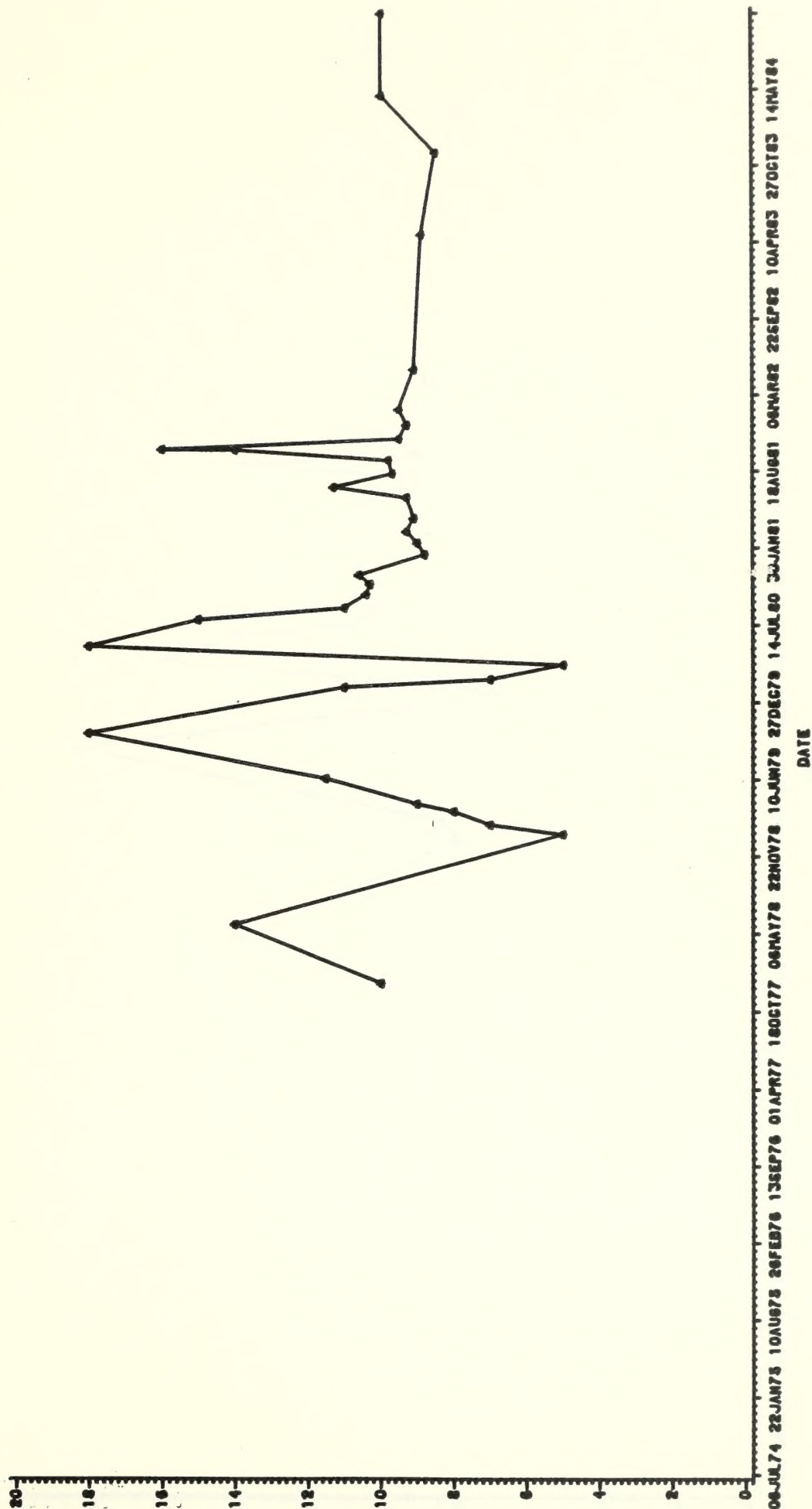
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-NA02



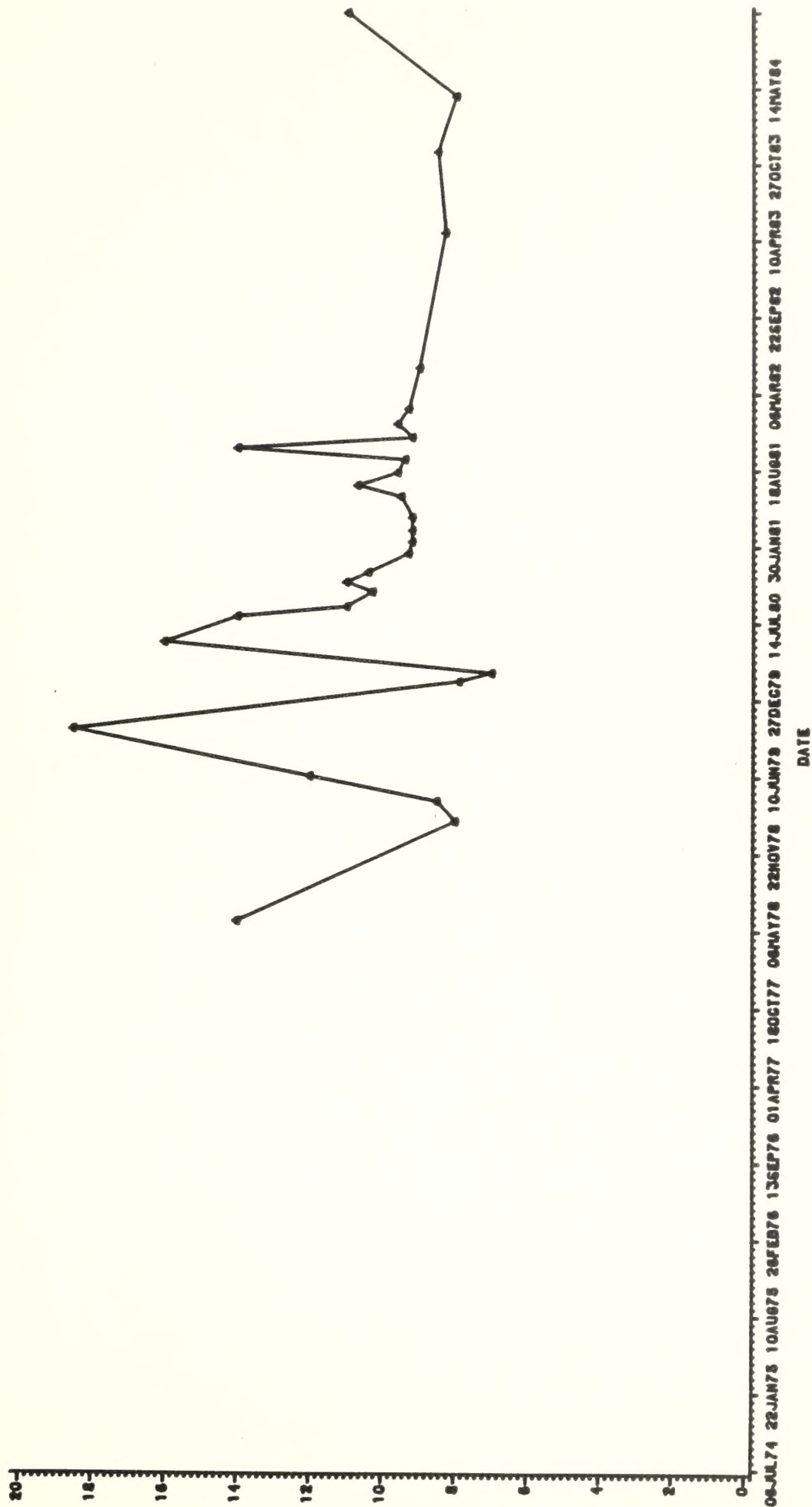
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG-MA03



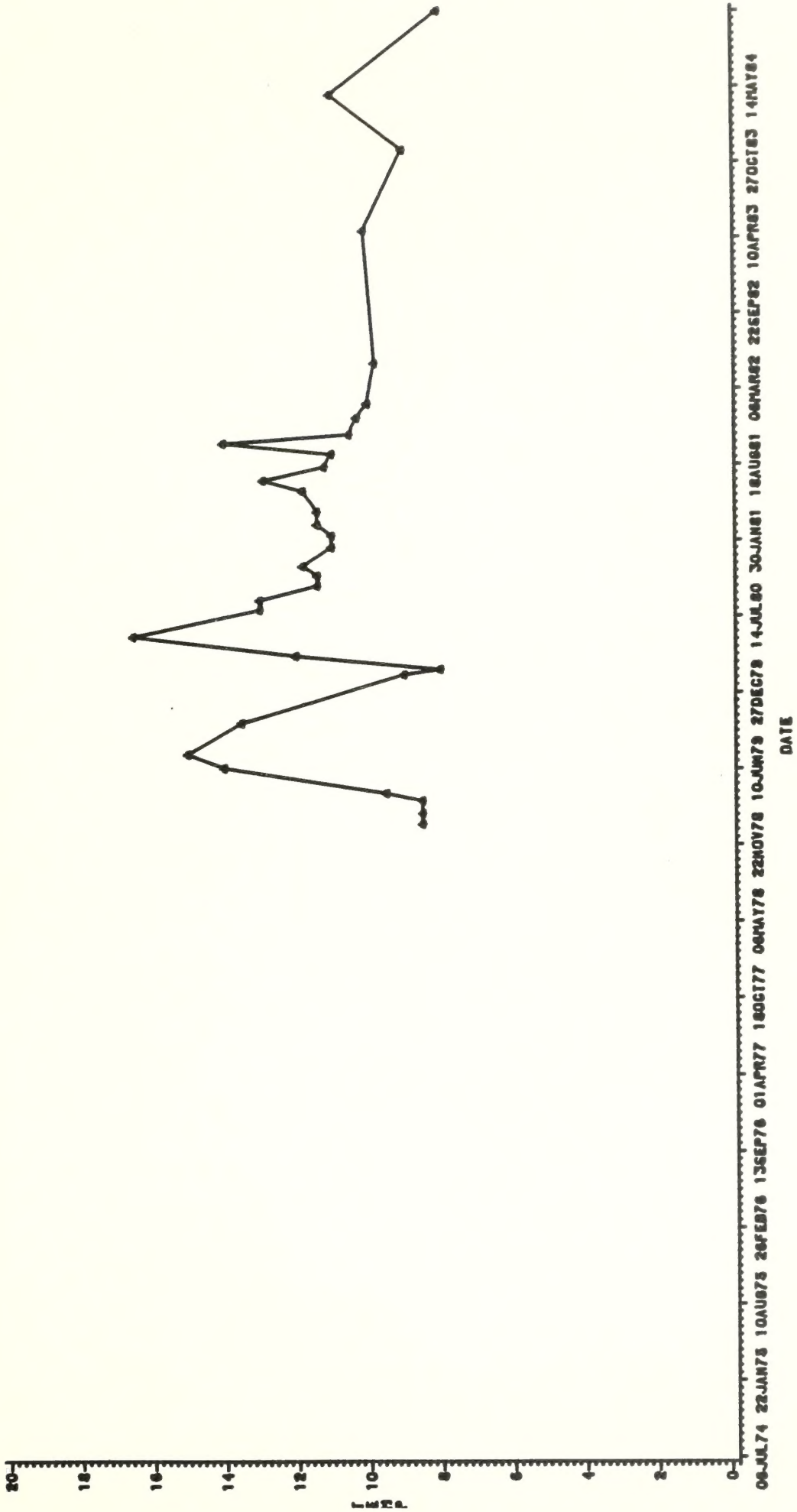
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-MA05

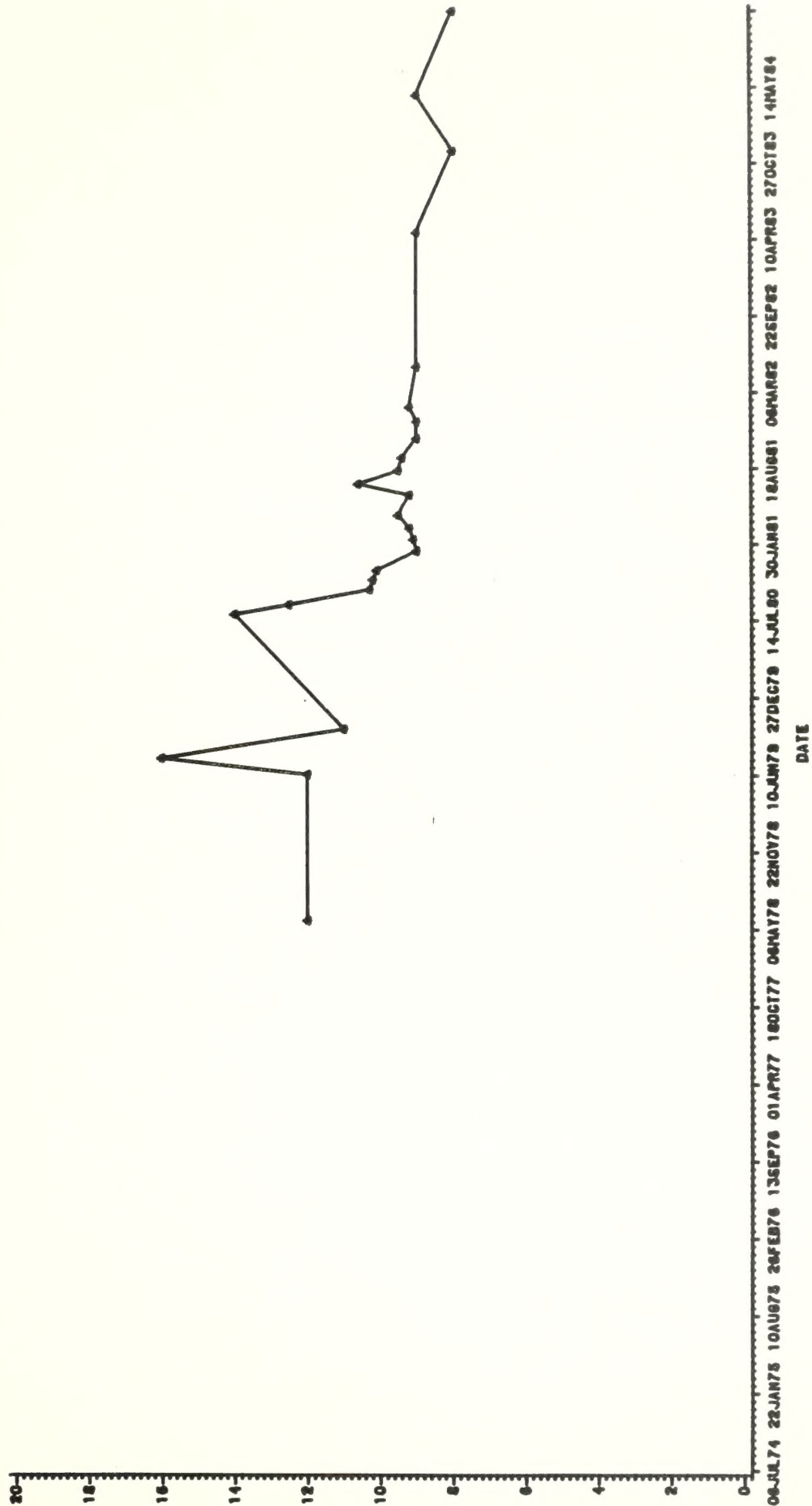


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-MA06

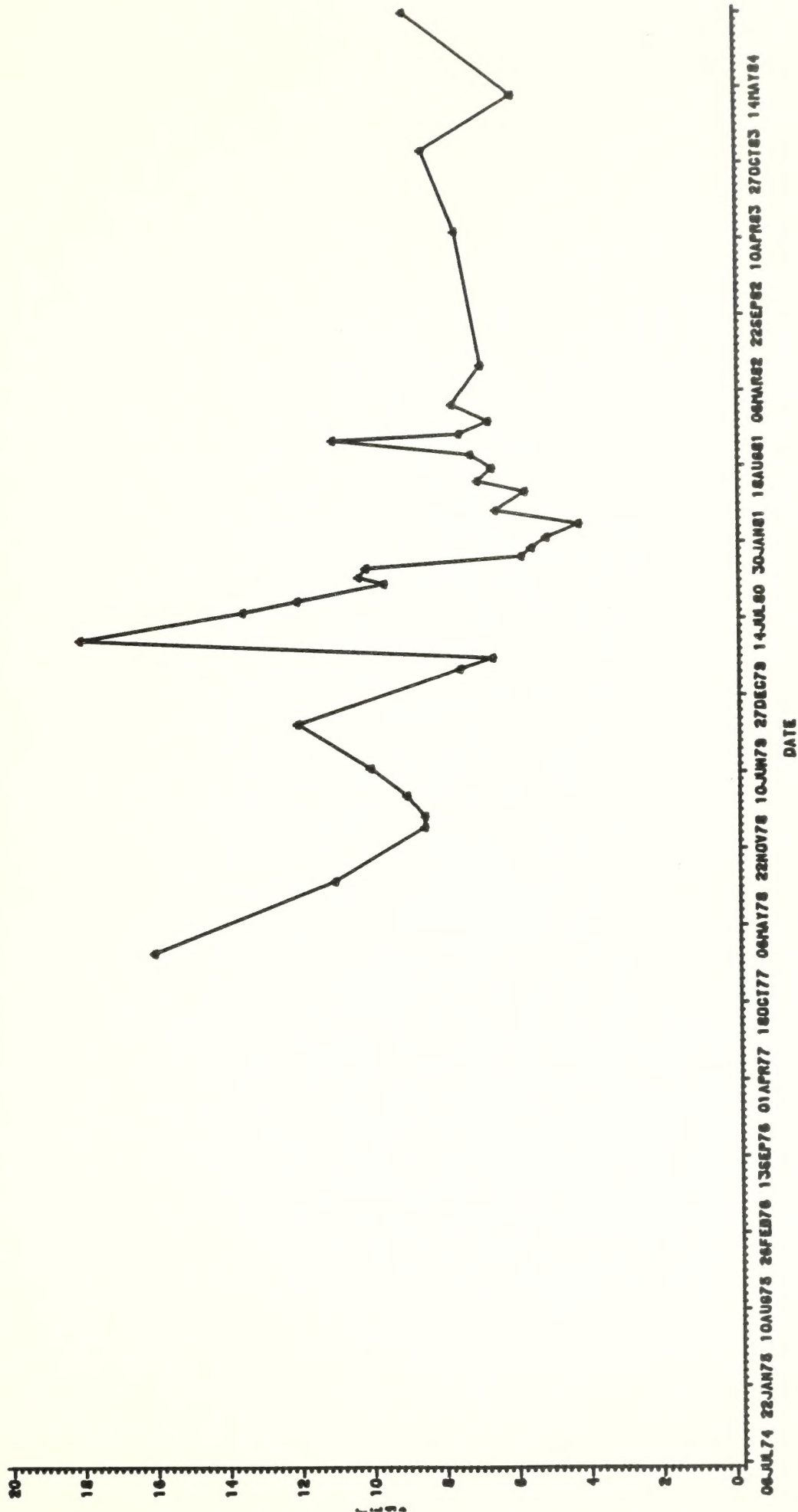


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS LOC-MA07



FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG-MA08



100

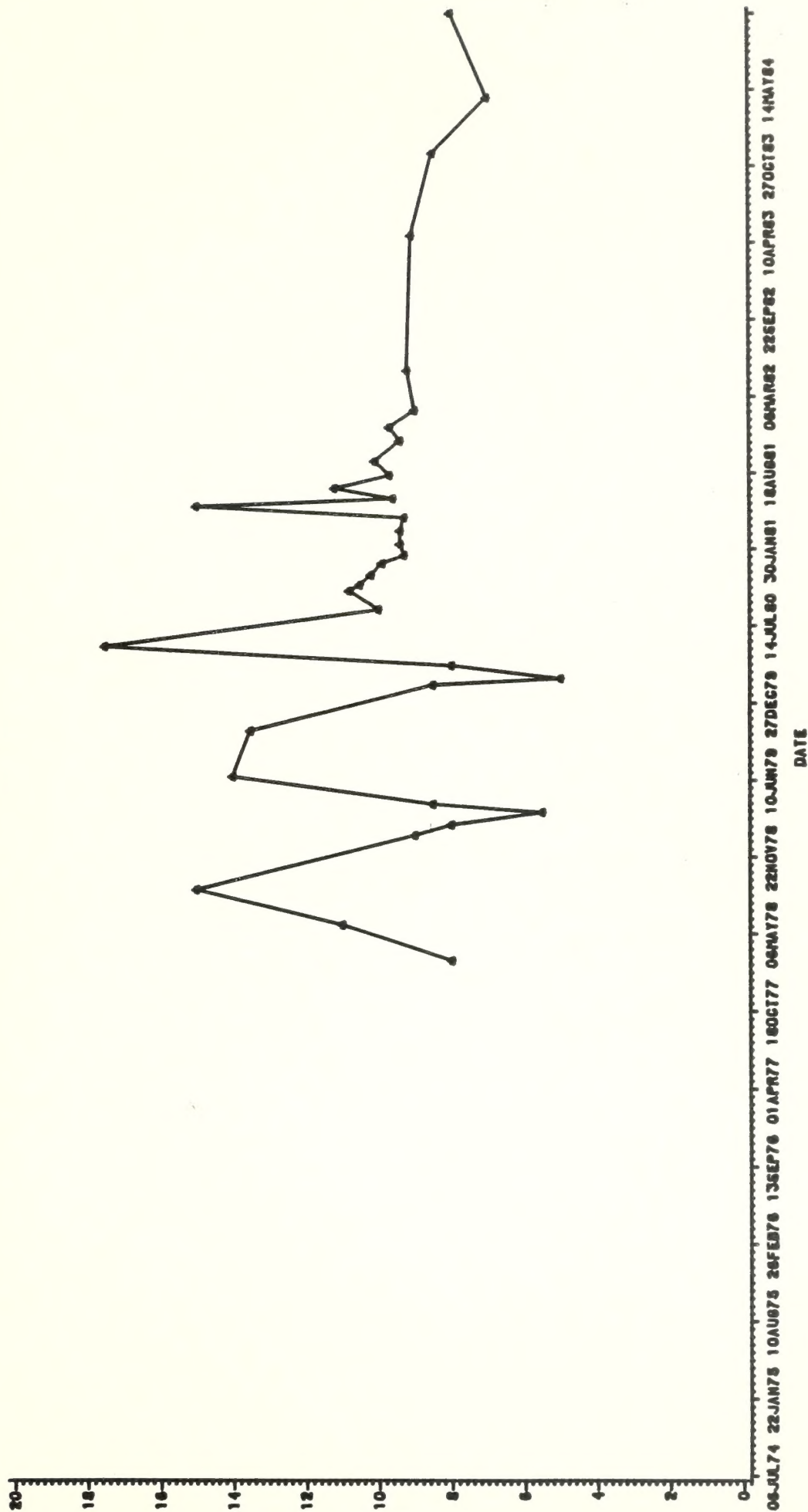
Wavelength (nm) 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940 960 980 1000



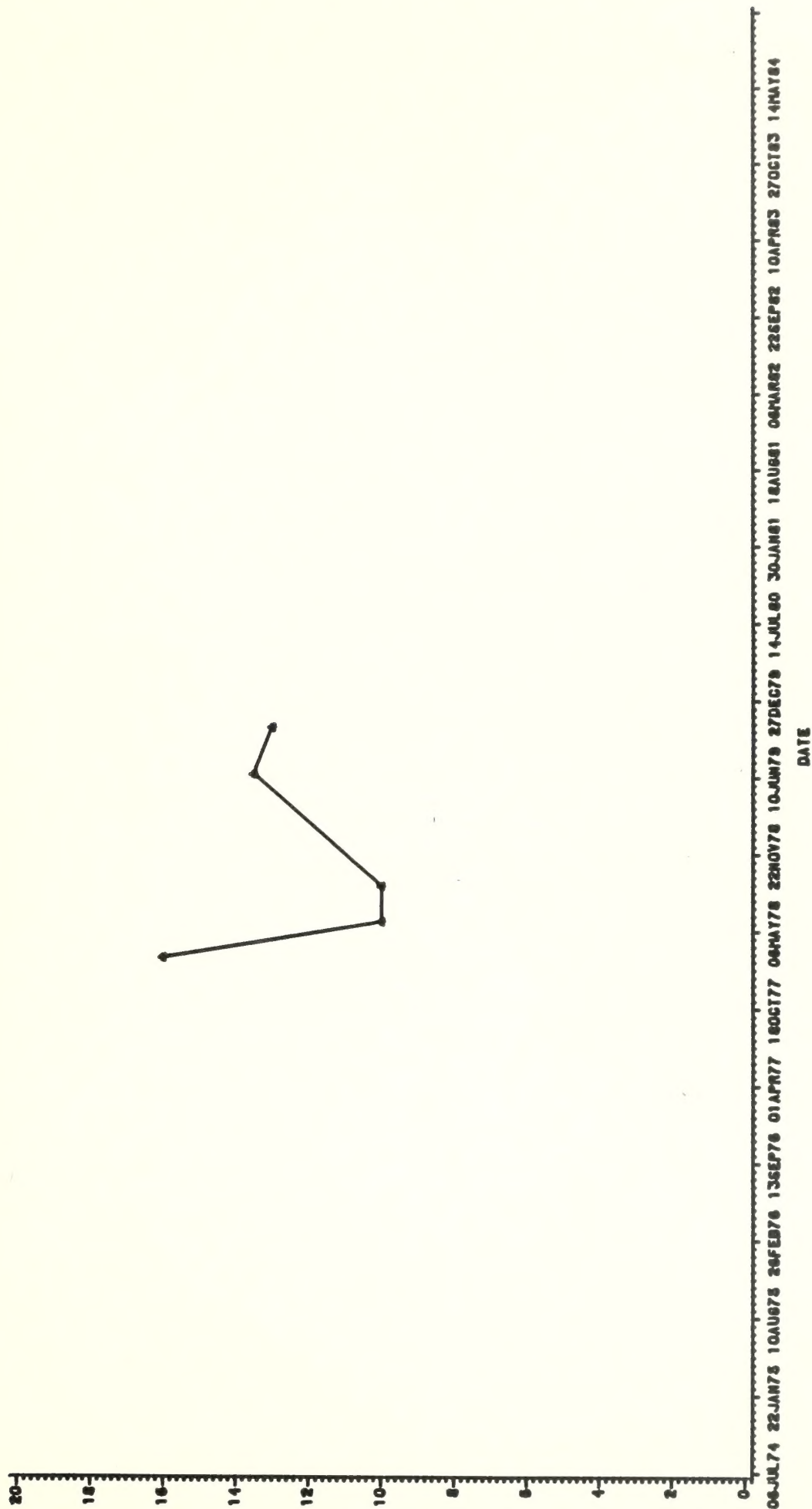
Wavelength (nm) 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940 960 980 1000

FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG-4408



FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS LOG-MA10



THE EFFECT OF TEMPERATURE ON THE RATE OF HYDROLYSIS OF THE ESTER OF A CATIONIC POLYMER

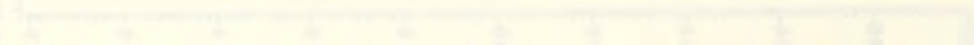
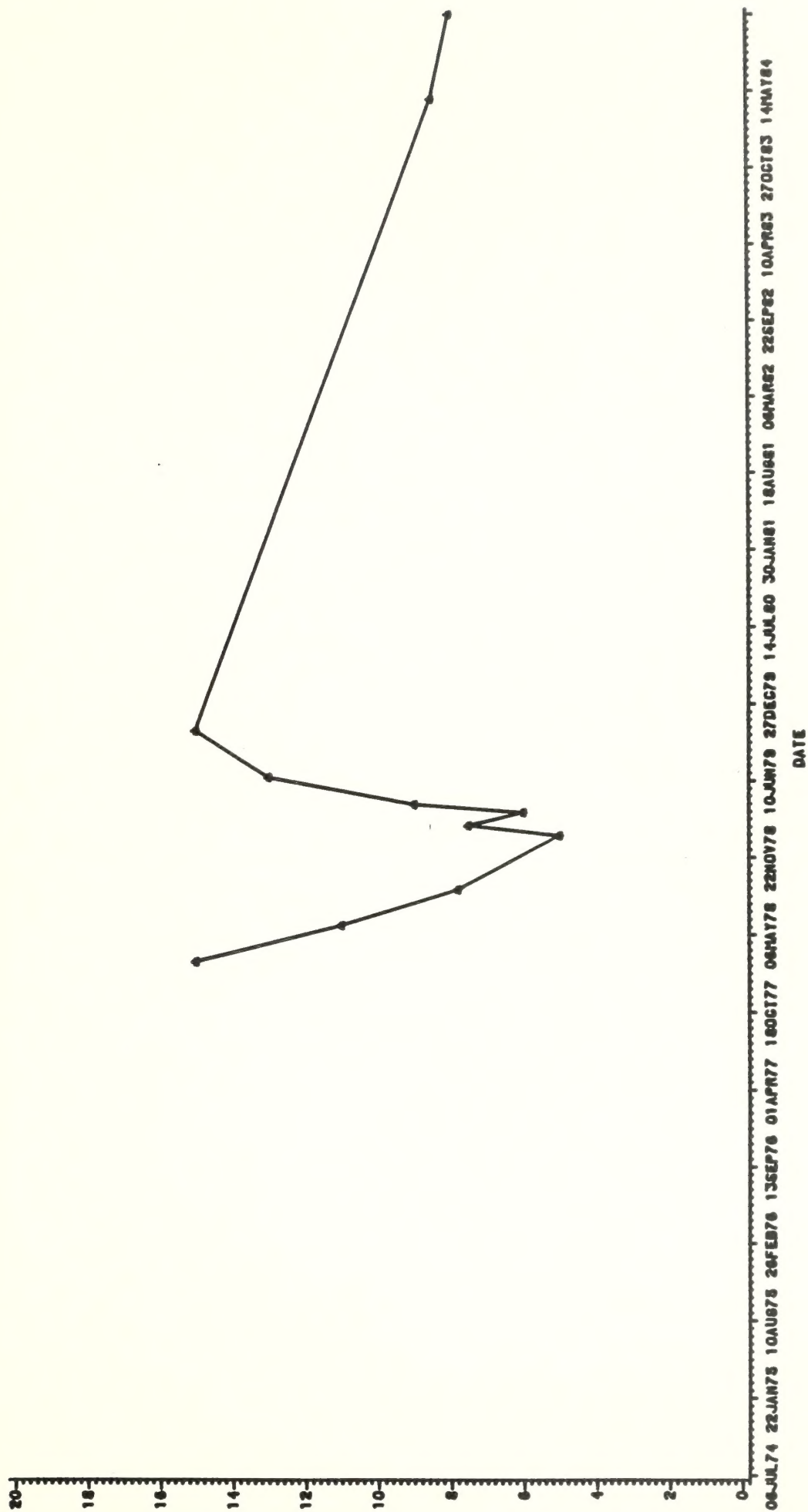


Fig. 1. Rate of hydrolysis of the ester of a cationic polymer as a function of temperature.

FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=MA11



2012

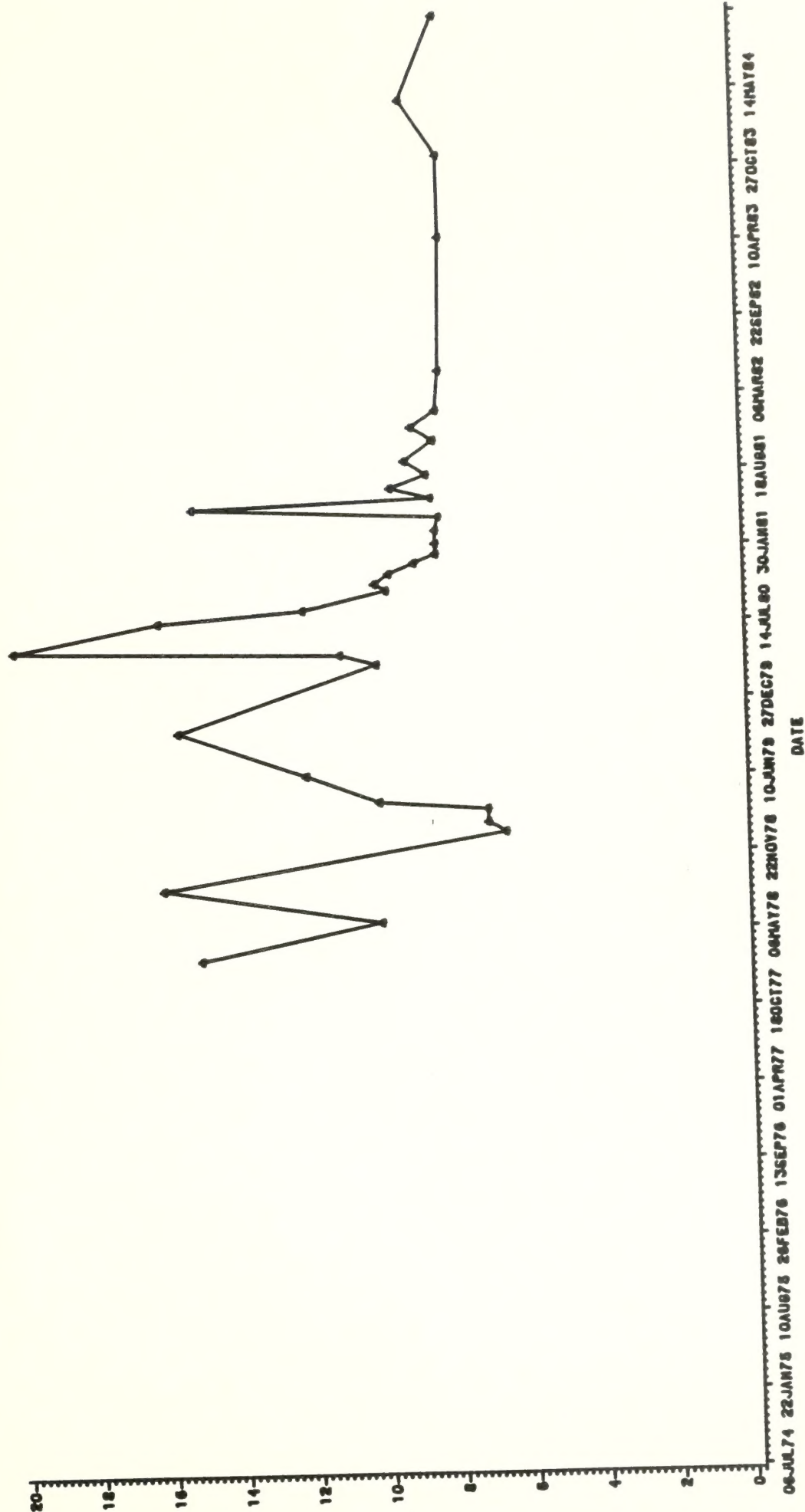
THESE DATA WERE OBTAINED FROM A SERIES OF EXPERIMENTS CONDUCTED AT THE UNIVERSITY OF CALIFORNIA, BERKELEY, AND ARE PRESENTED HERE FOR YOUR INFORMATION.



UNIVERSITY OF CALIFORNIA, BERKELEY
DEPARTMENT OF CHEMISTRY
BERKELEY, CALIFORNIA 94720-1080
TEL: (415) 845-5100
FAX: (415) 845-5101
WWW: WWW.CHEM.UCLA.EDU

FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG-WA12



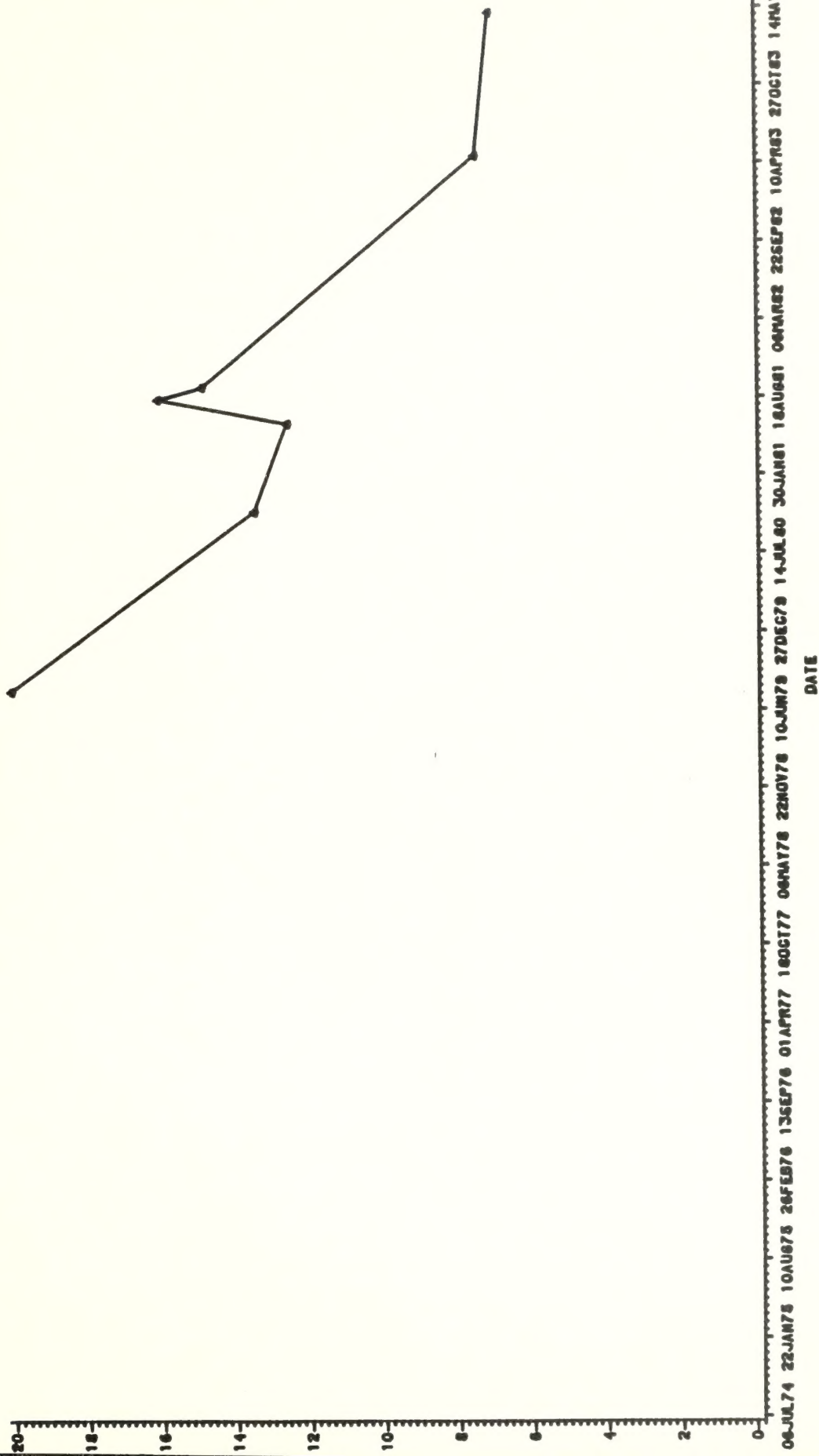
1942



TEMPERATURE (DEG C) 1942

FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG-WASS



2012

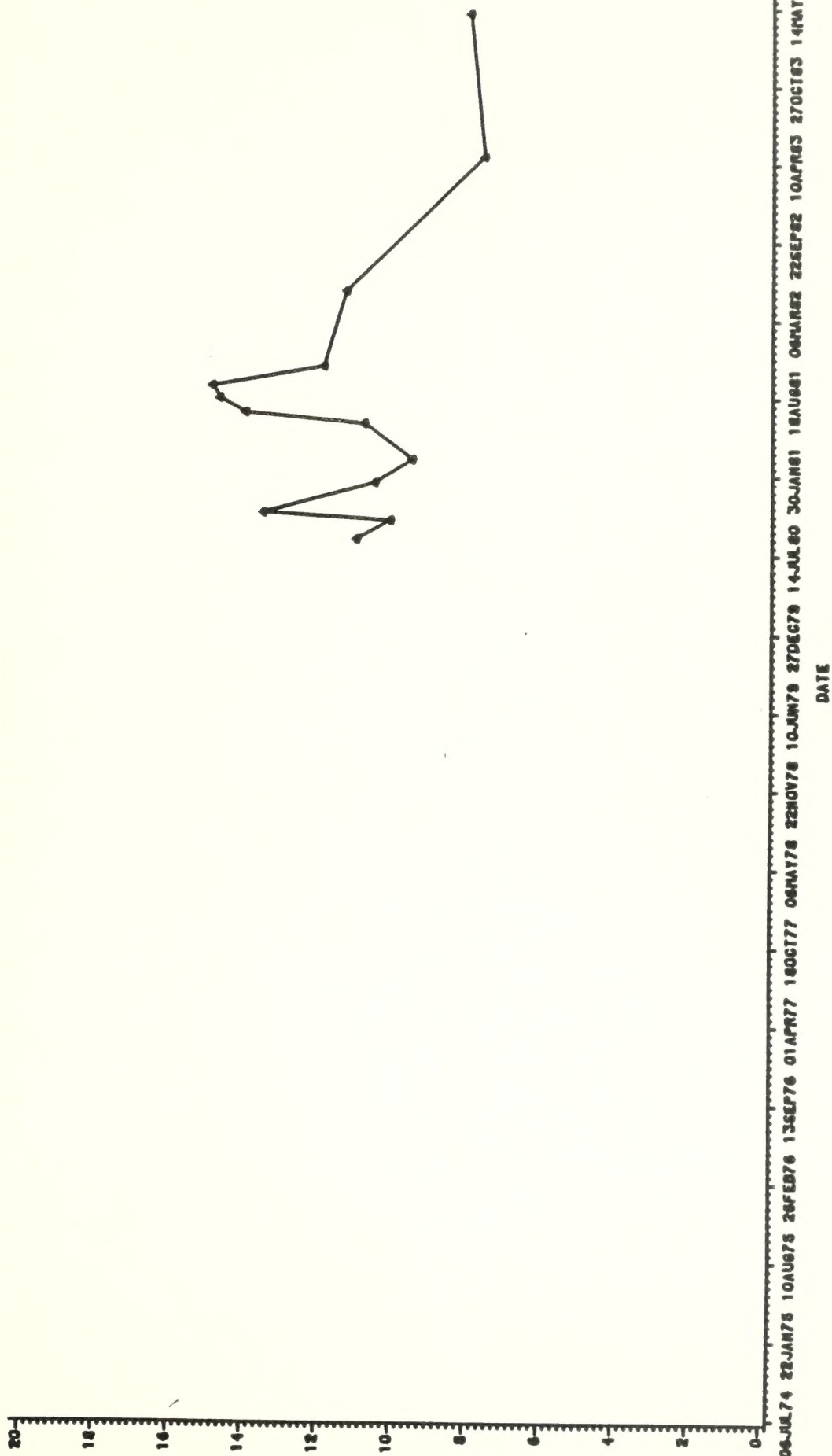
THESE RESULTS ARE IN ACCORD WITH THE FINDINGS OF THE 2008 STUDY WHICH SHOWED THAT THE AVERAGE ANNUAL GROWTH RATE OF THE U.S. ECONOMY WAS 2.1% IN 2008 AND 2.2% IN 2009.



FIGURE 1. PERCENTAGE OF THE U.S. POPULATION AGED 65 AND OVER, 1960-2010

FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-W456



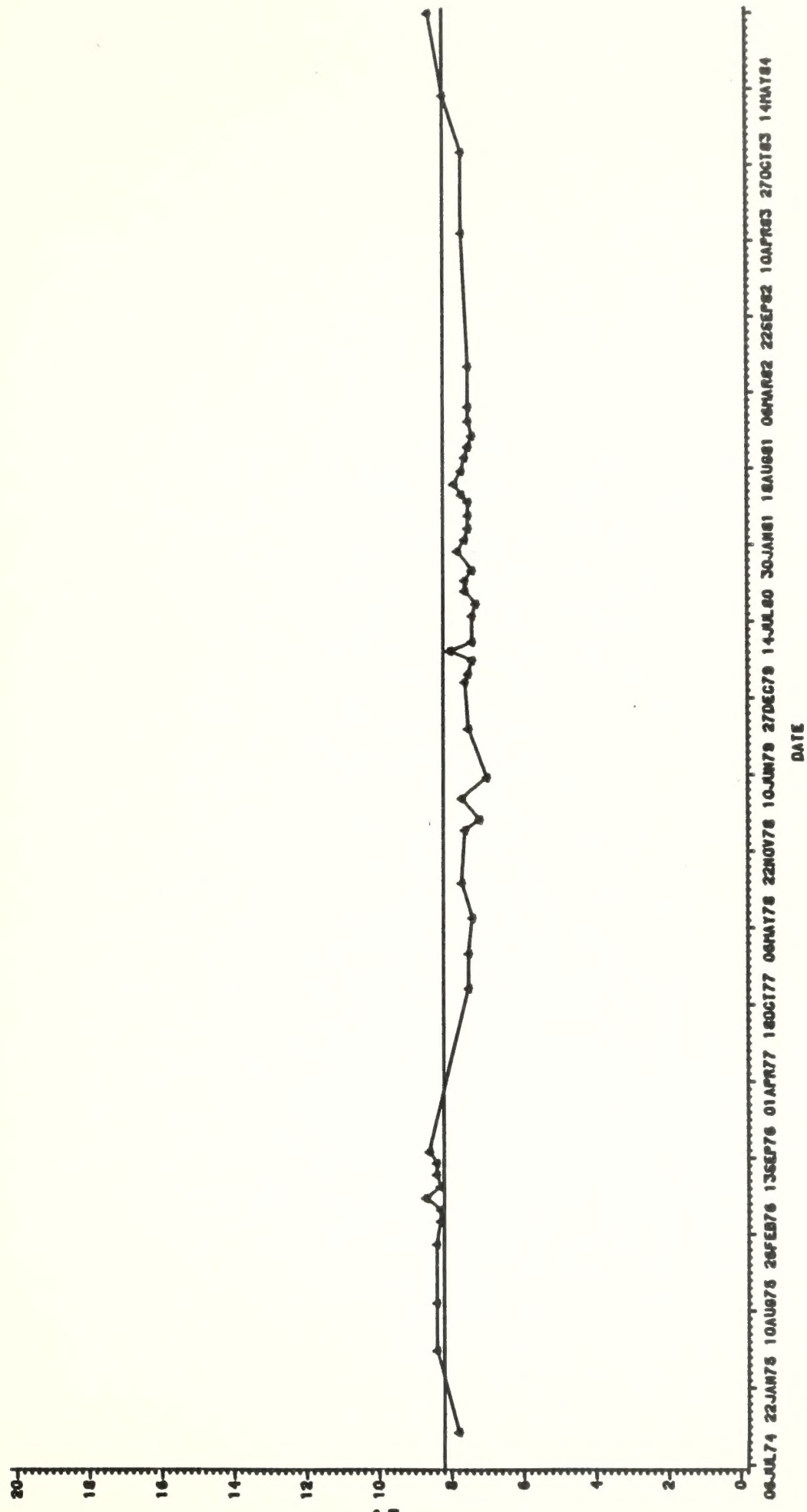
1964

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FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-NA01



---- (BASELINE MEAN 8.2 UNITS)

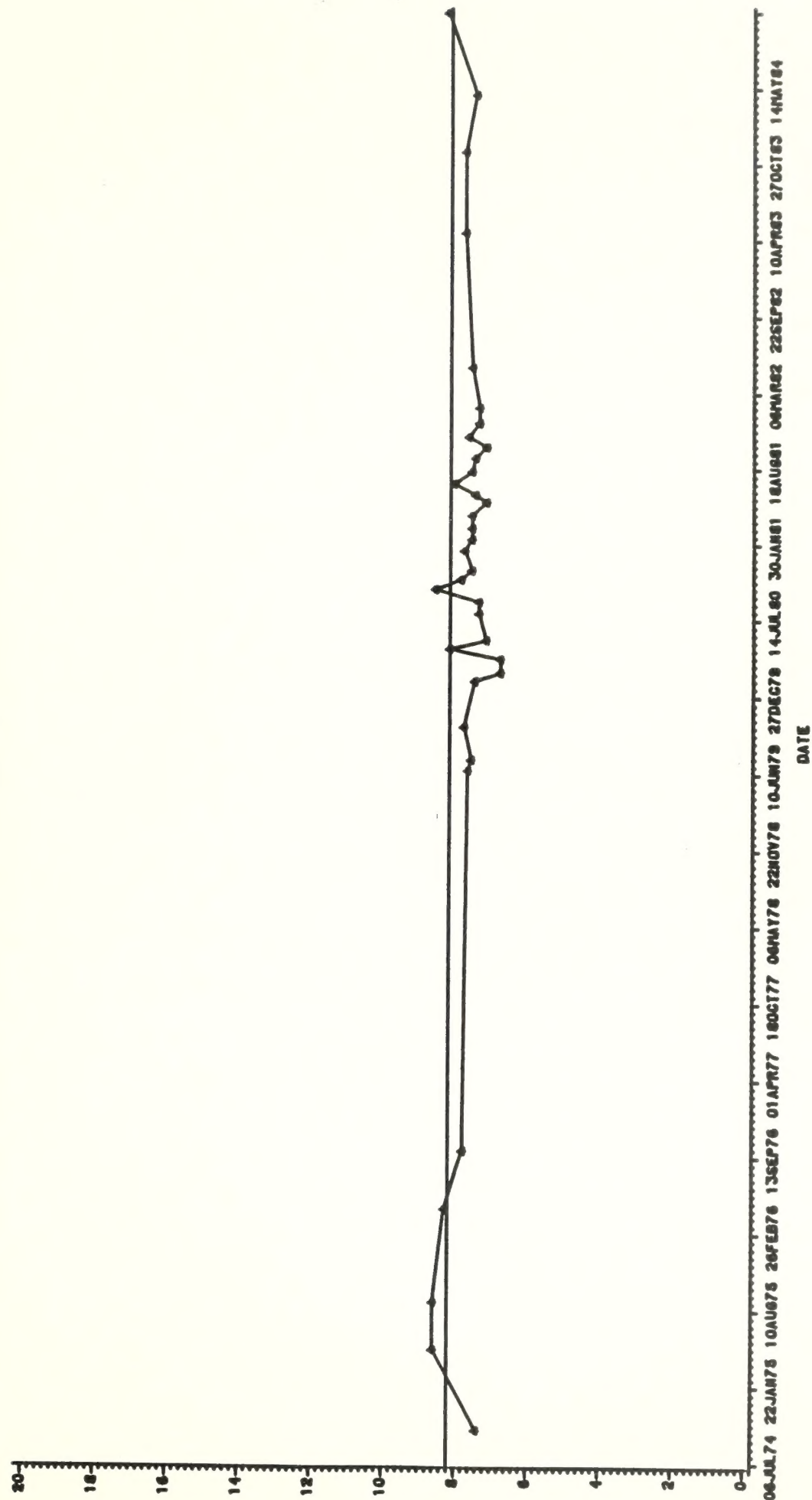
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1000



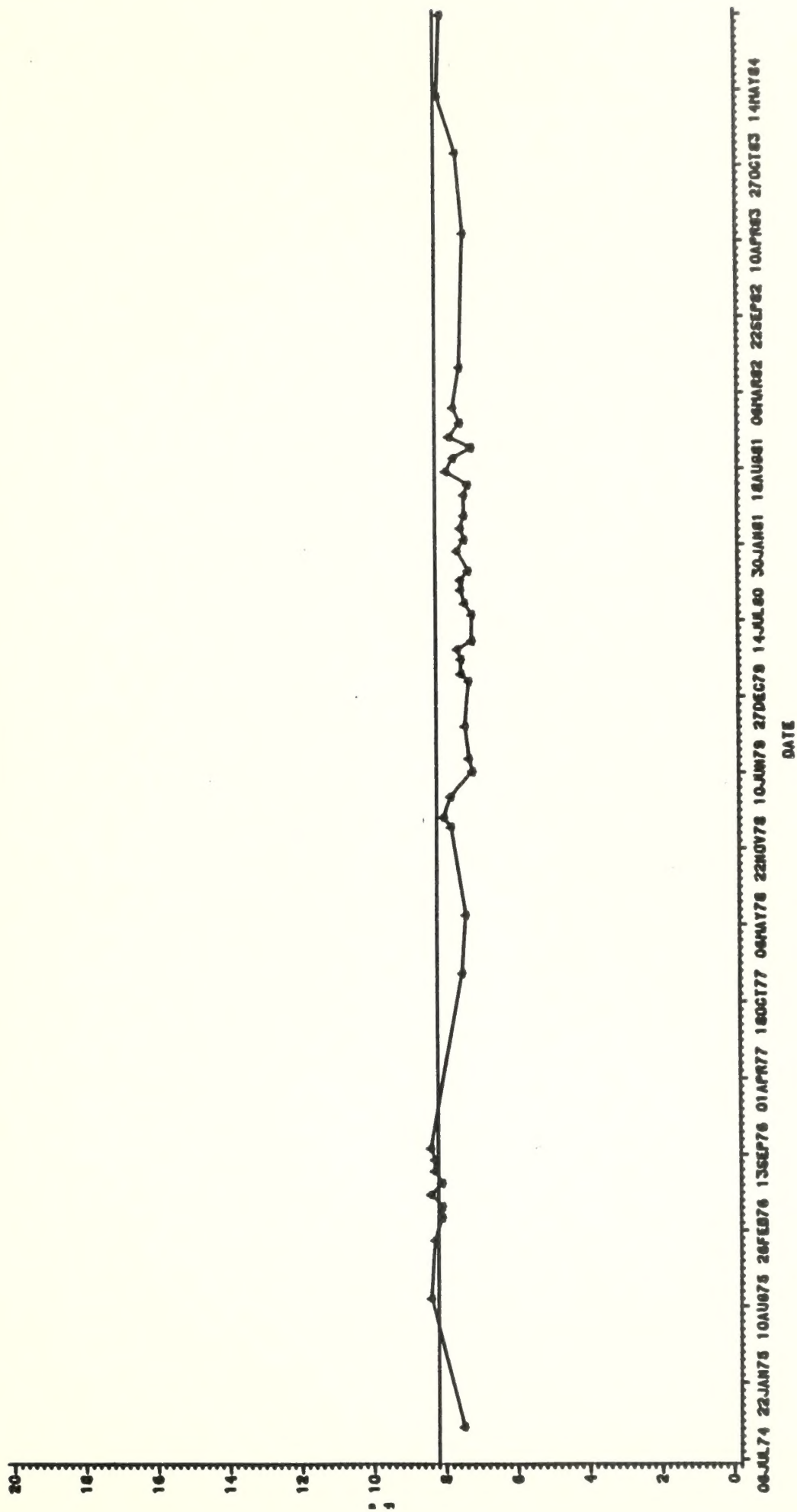
DEPTH (ft) vs. TIME (sec)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC=U102



---- (BASELINE MEAN 8.2 UNITS)

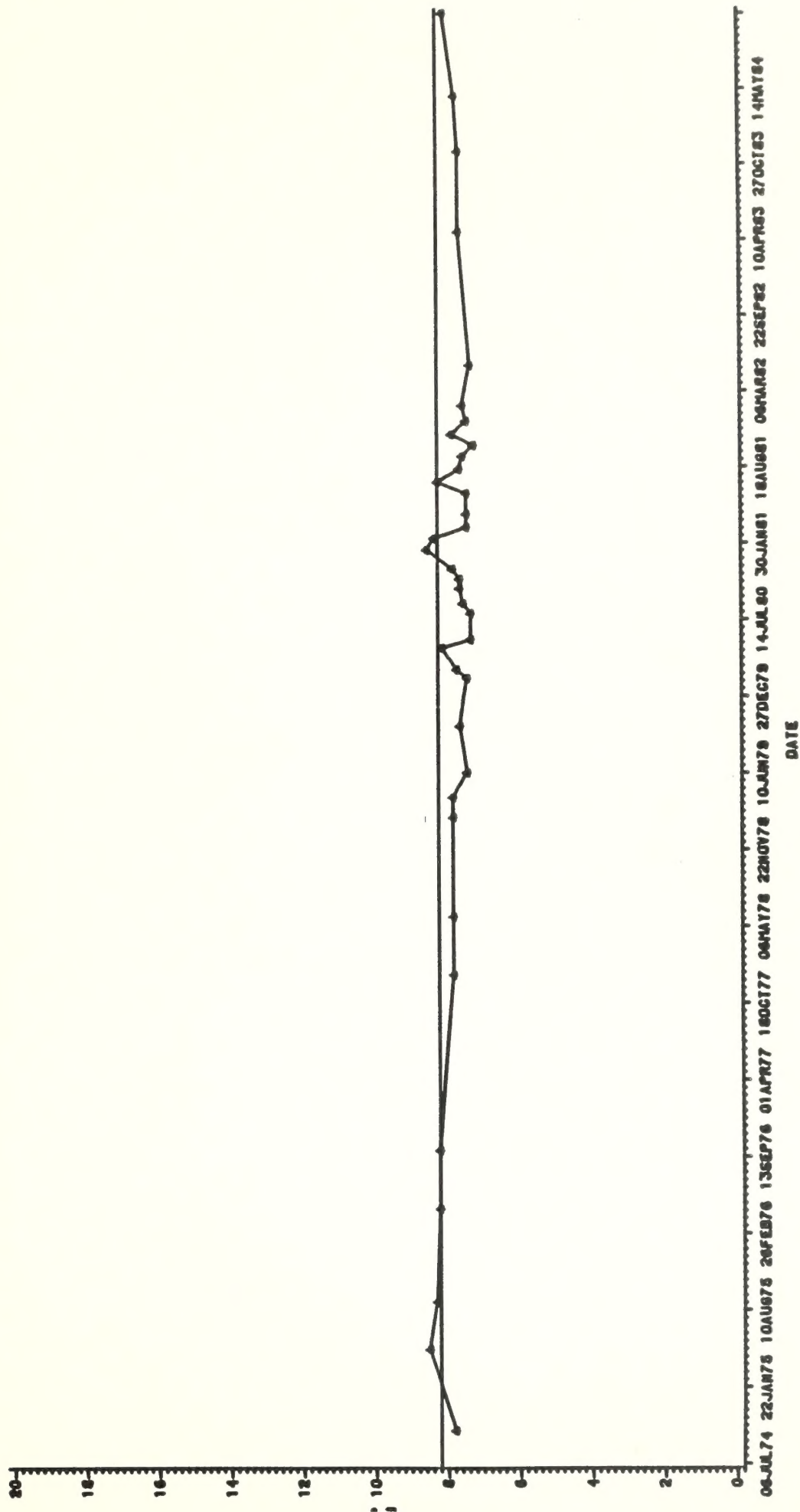
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-4A03



---- (BASELINE MEAN 8.2 UNITS)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-MA05



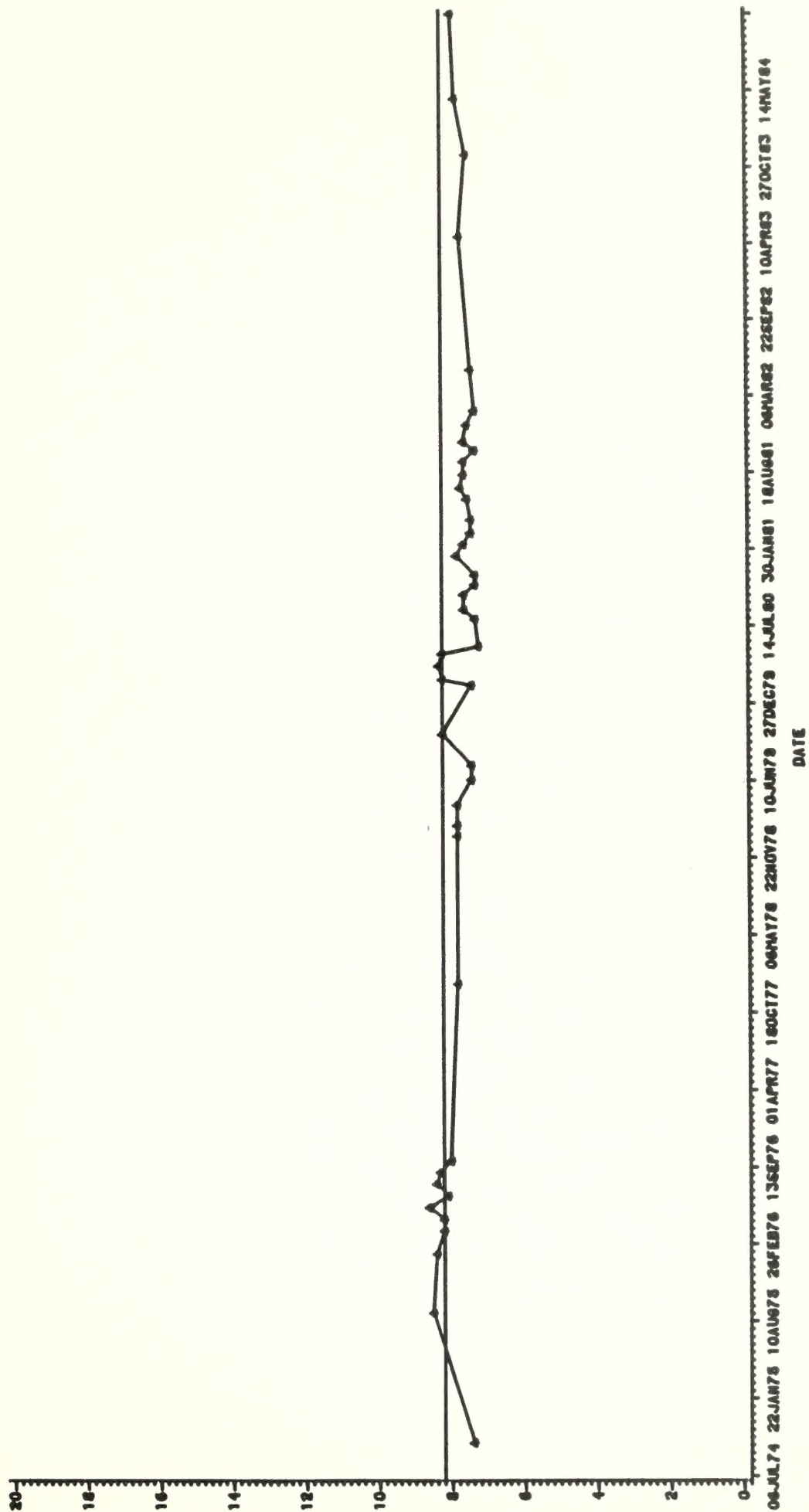
— Surface water level

1974



CHARTER LIAISON JOURNAL OF THE CANADIAN HYDROLOGICAL SOCIETY

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-MA06



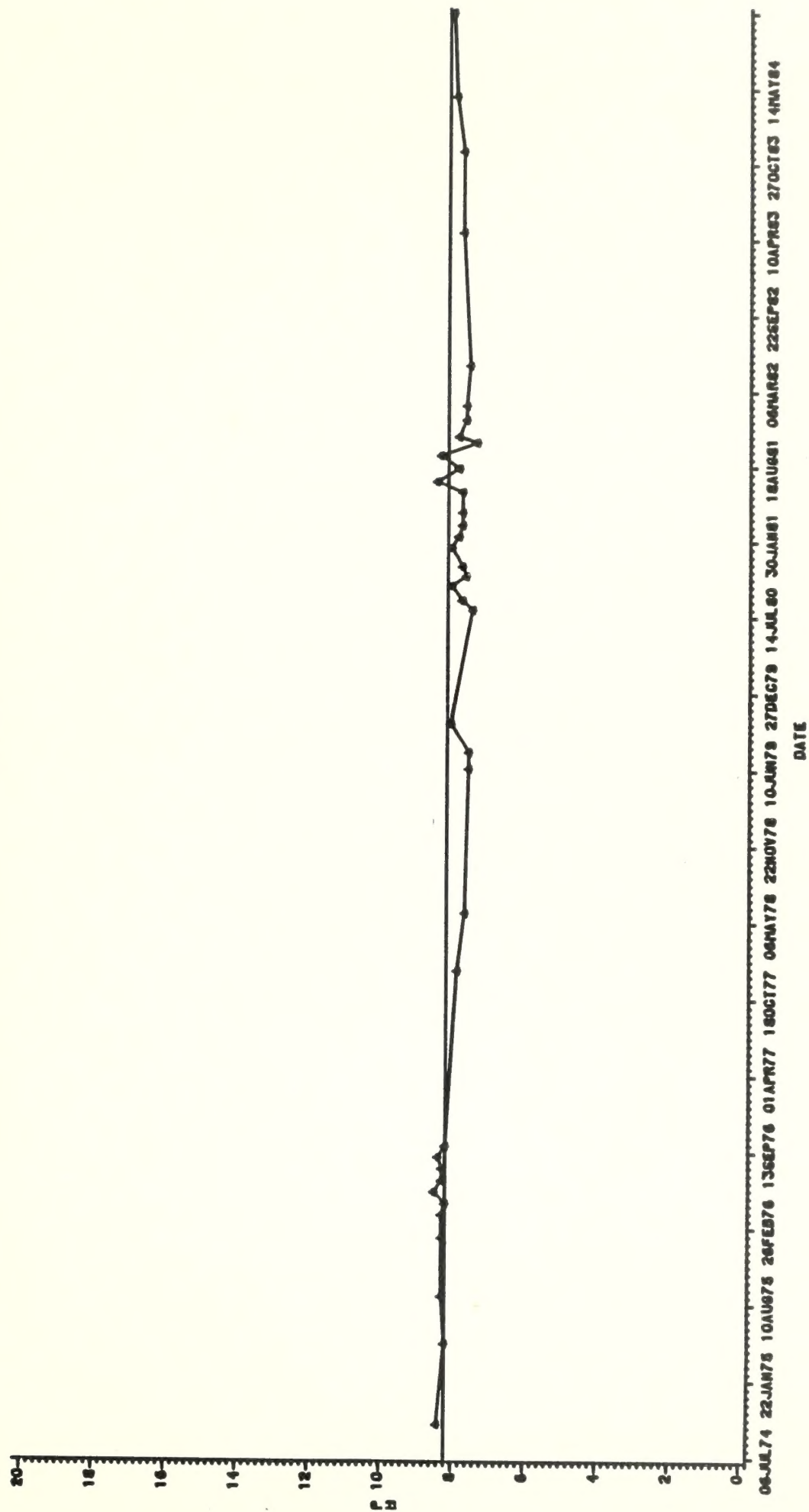
--- (BASELINE MEAN 8.2 UNITS)

1971



1971 (1971) LINE SERIES OF VOLUME AND AREA

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-MA07



--- (BASELINE MEAN 8.2 UNITS)

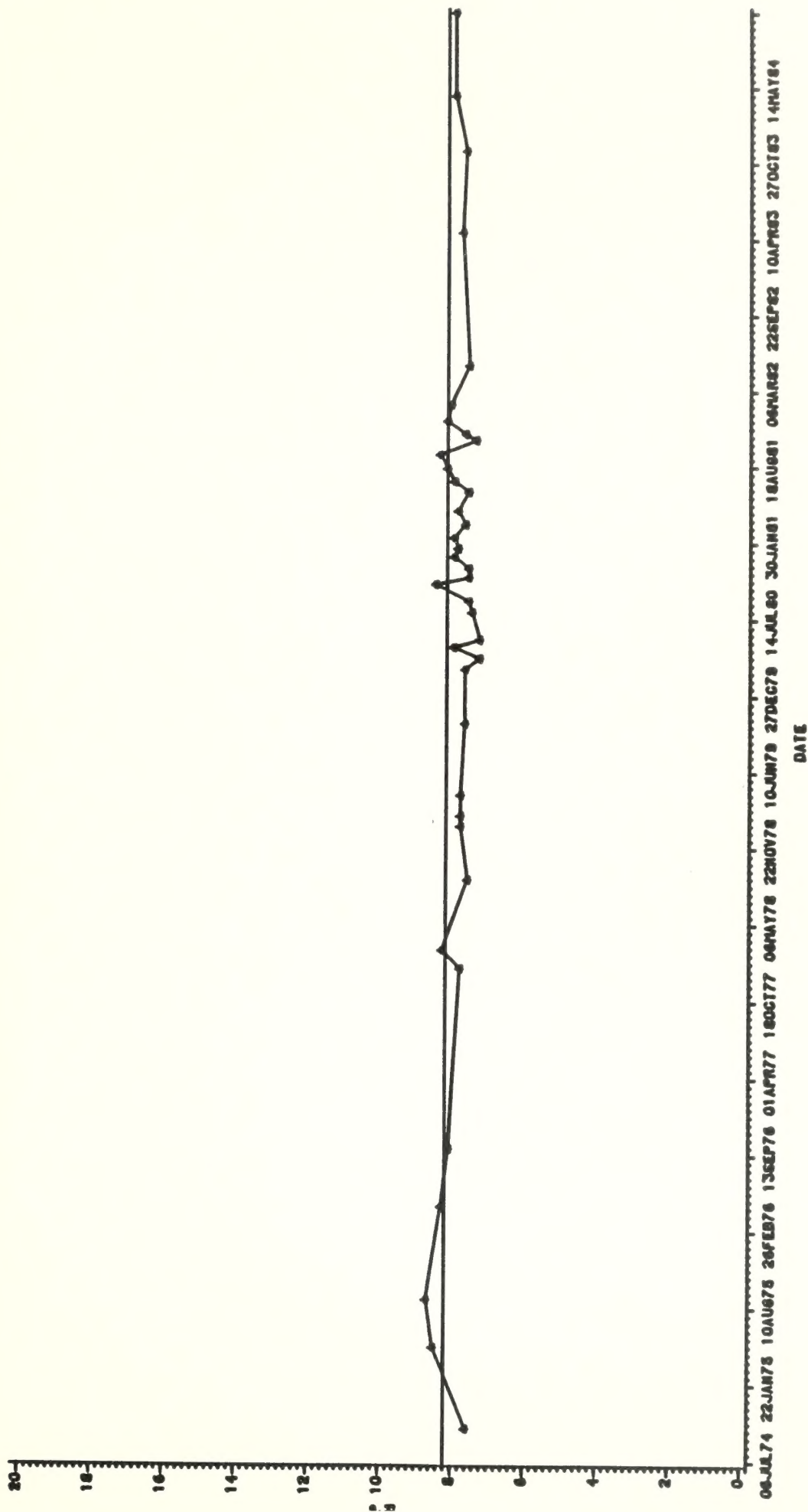
1914



SECTION TWO (continued) OF THE REPORT ON THE PROGRESS OF THE WORK

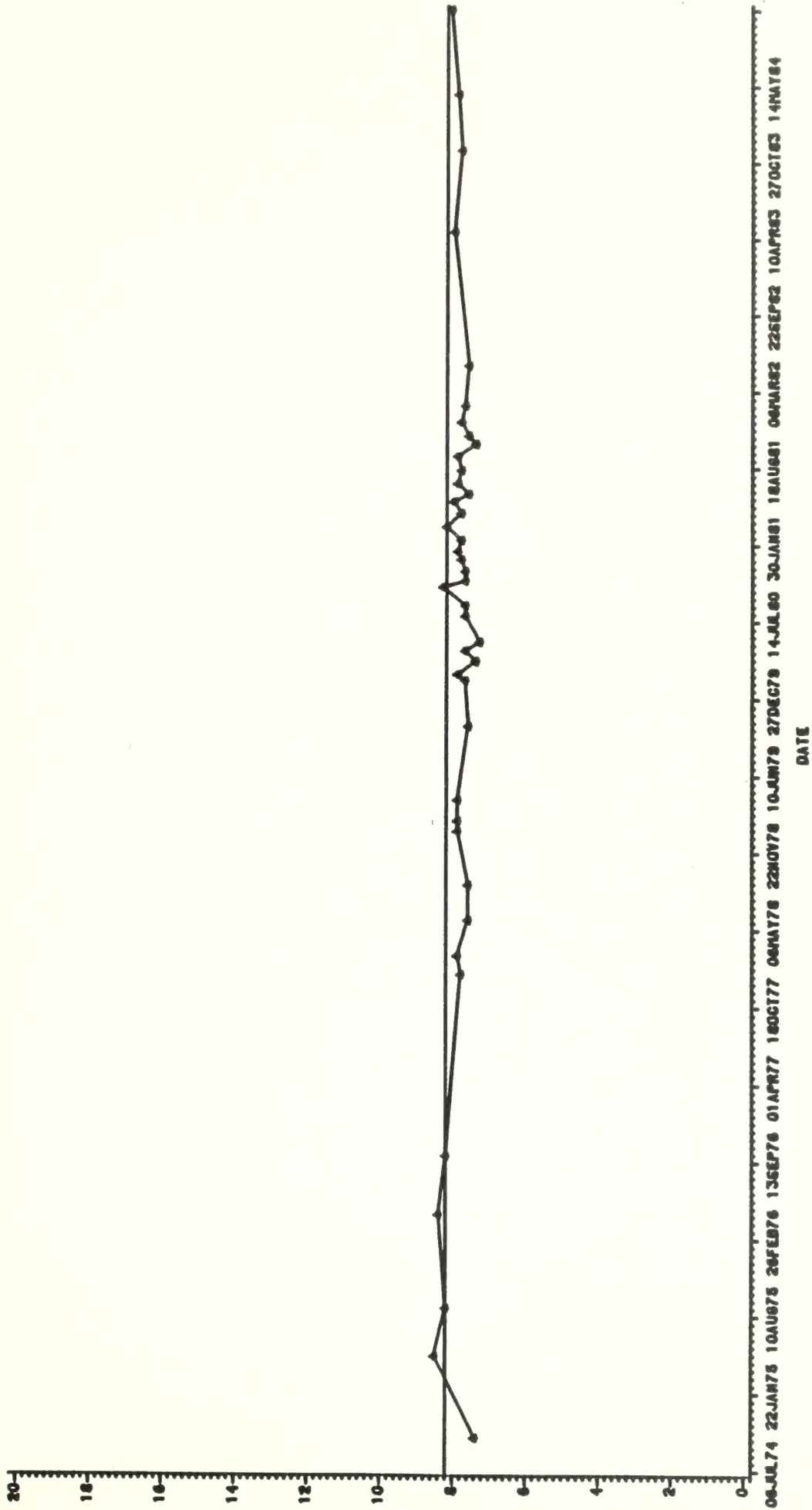
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-1408



---- (BASELINE MEAN 8.2 UNITS)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-4008



--- (BASELINE MEAN 8.2 UNITS)

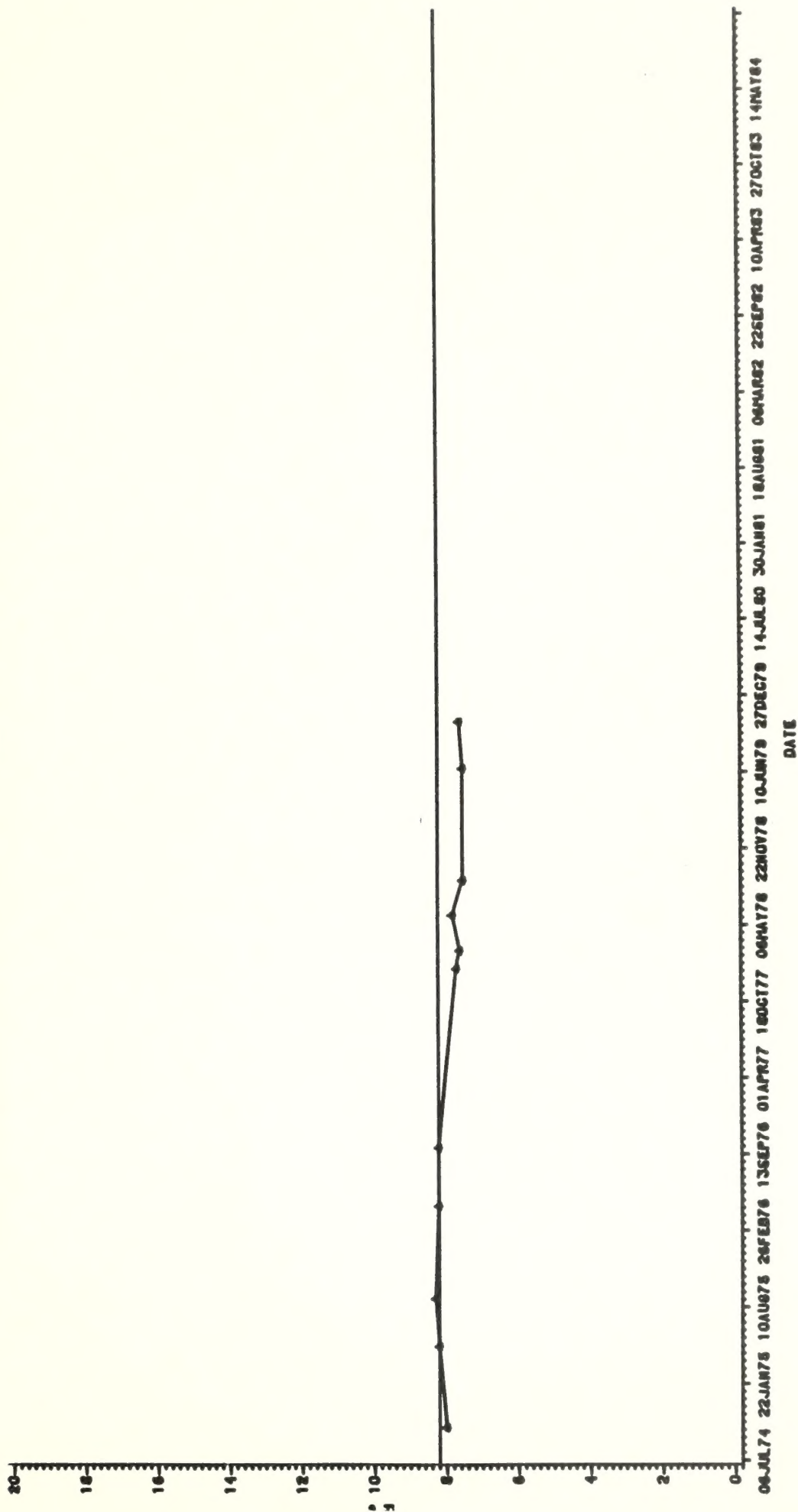
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100 10 20 30 40 50 60 70 80 90 100

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

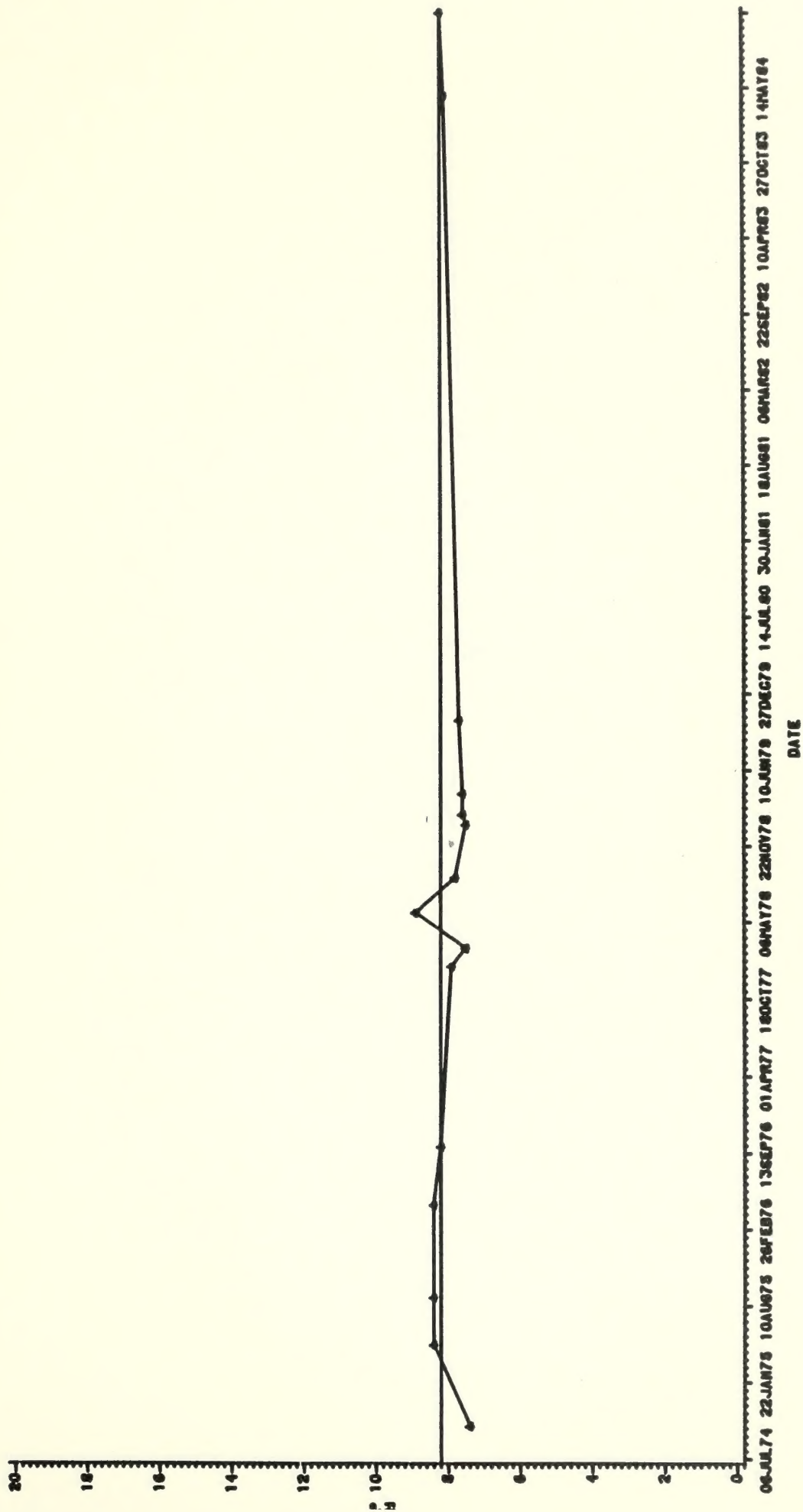
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---- (BASELINE MEAN 8.2 UNITS)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

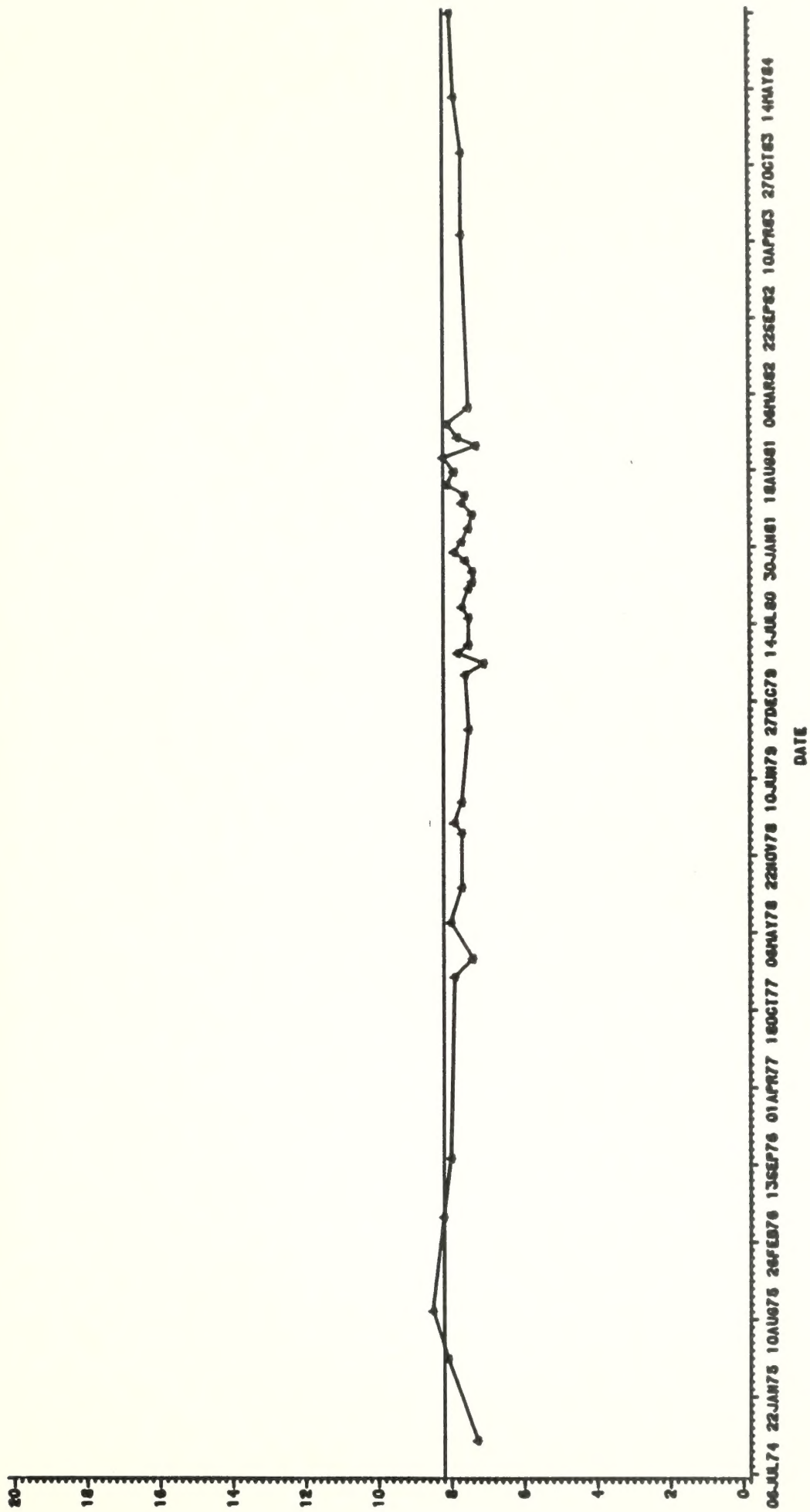
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--- (BASELINE MEAN 8.2 UNITS)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOG-WA12



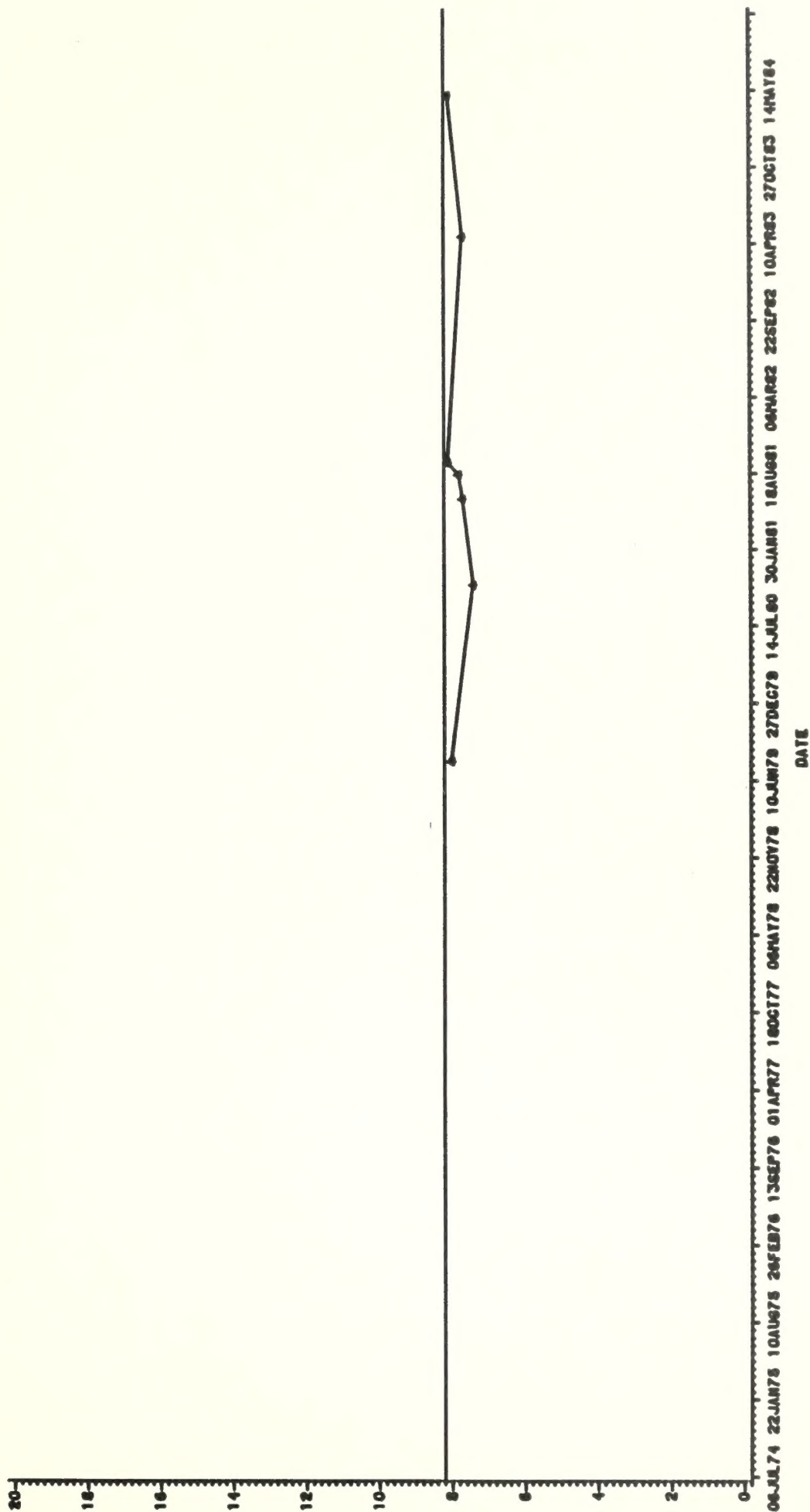
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CHIEF JIM JAVILLA TO SENATE SALT (1970) BY CLINT



CHIEF JIM JAVILLA TO SENATE SALT (1970) BY CLINT

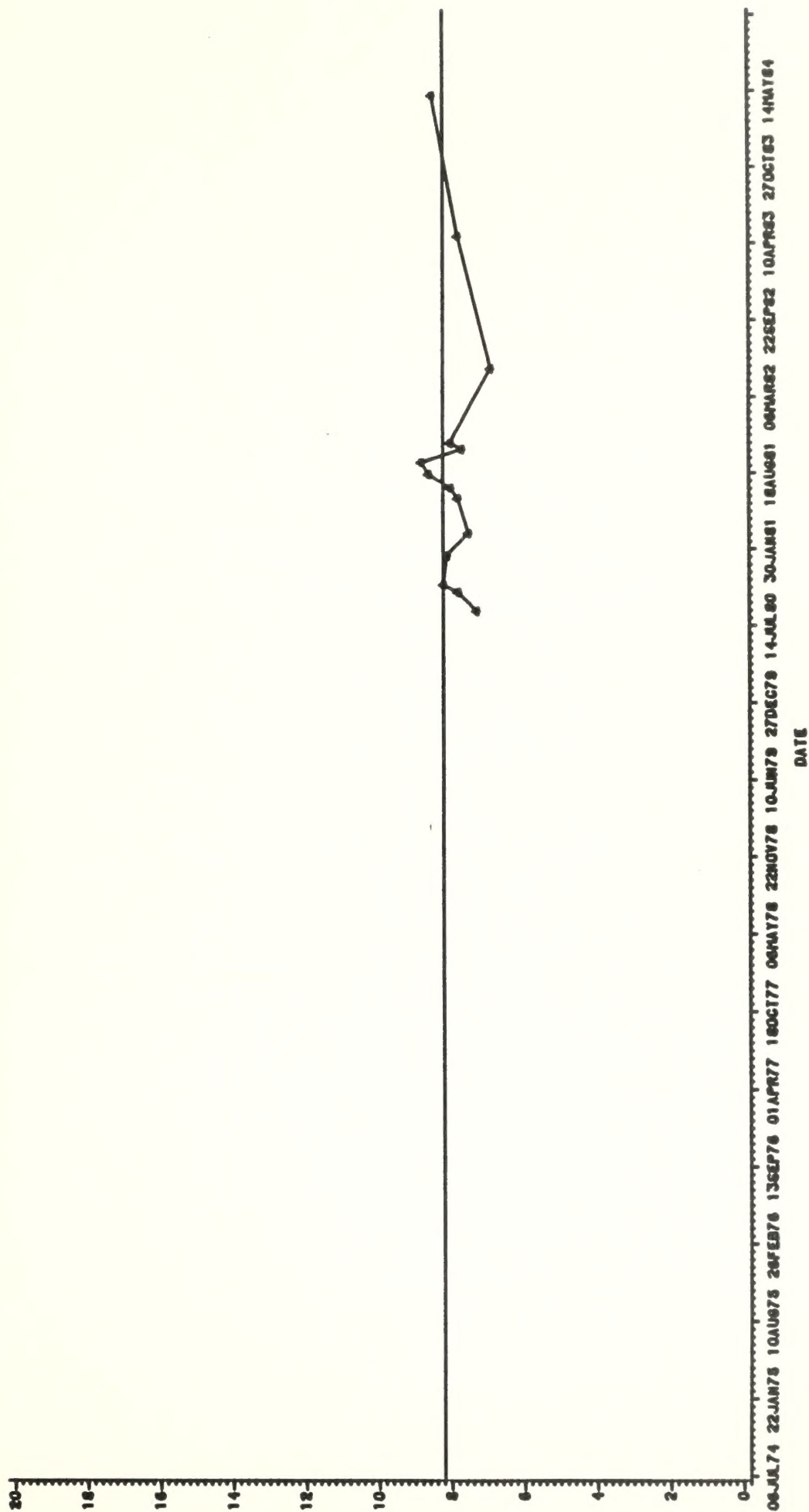
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-MASS



--- (BASELINE MEAN 8.2 UNITS)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

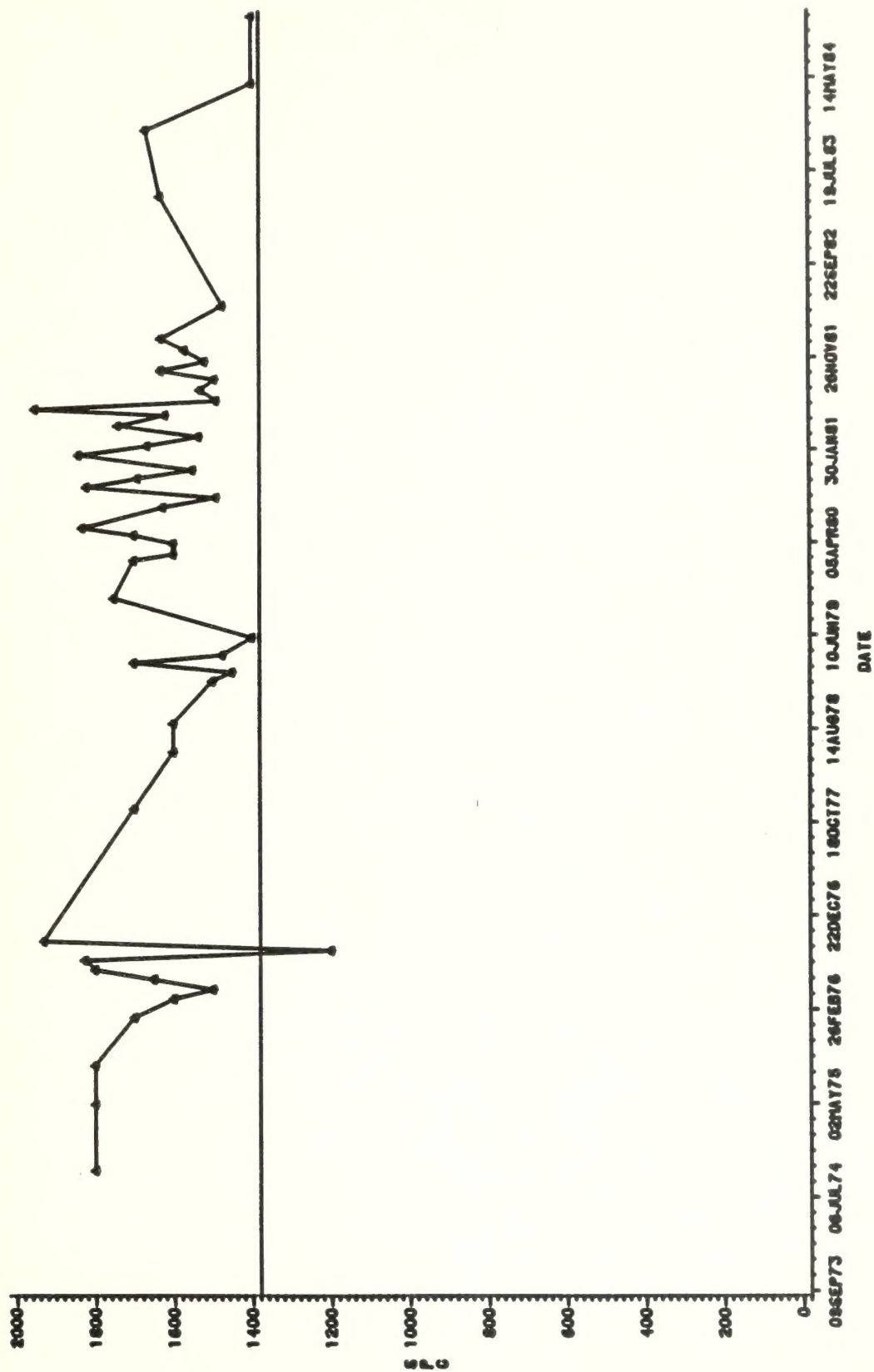
LOC#4456



--- BASELINE MEAN 8.2 UNITS

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-11401



--- (BASELINE MEAN 1360 UMHOS)

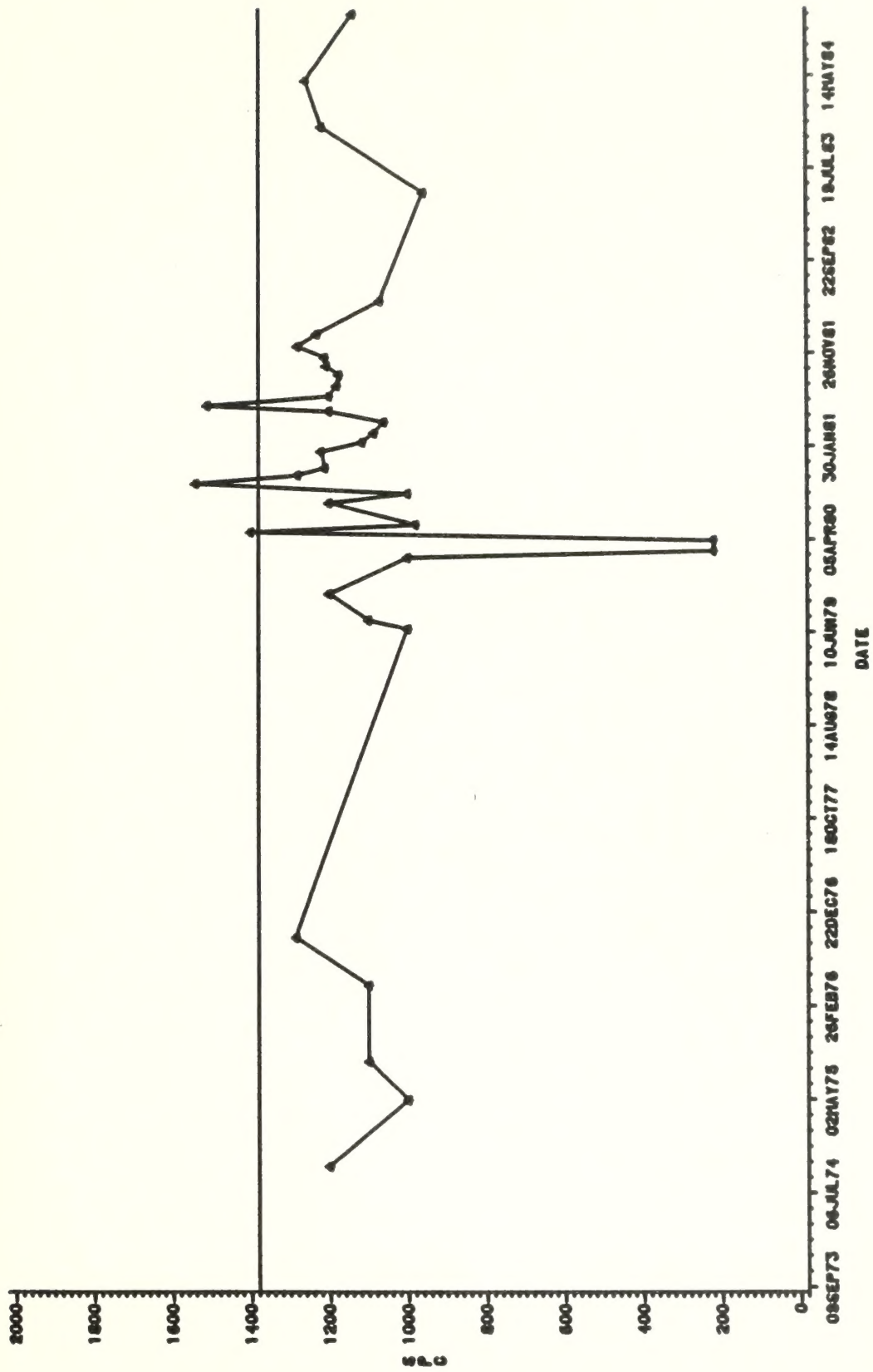
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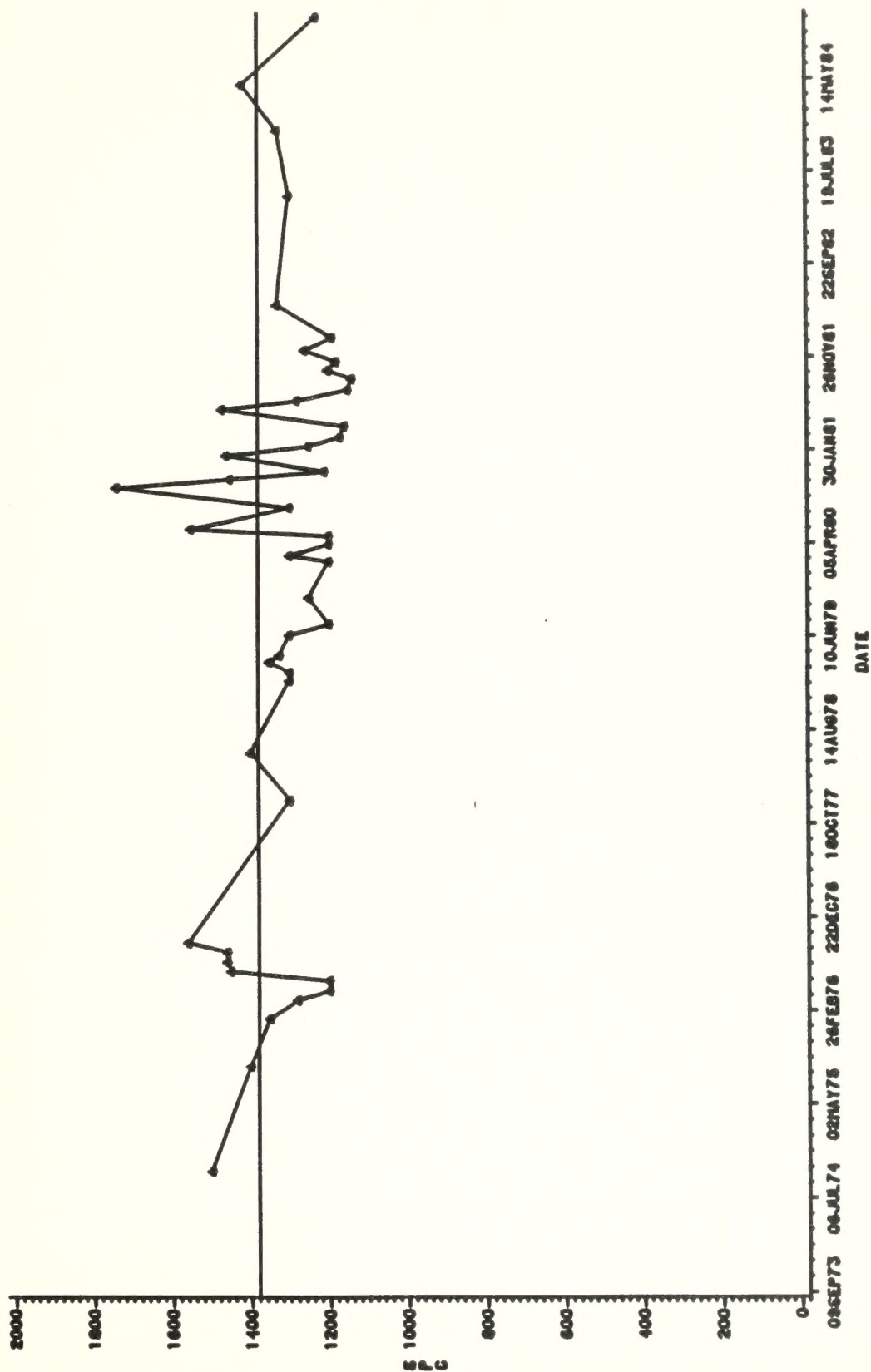
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---- (BASELINE MEAN 1380 UMHOS)

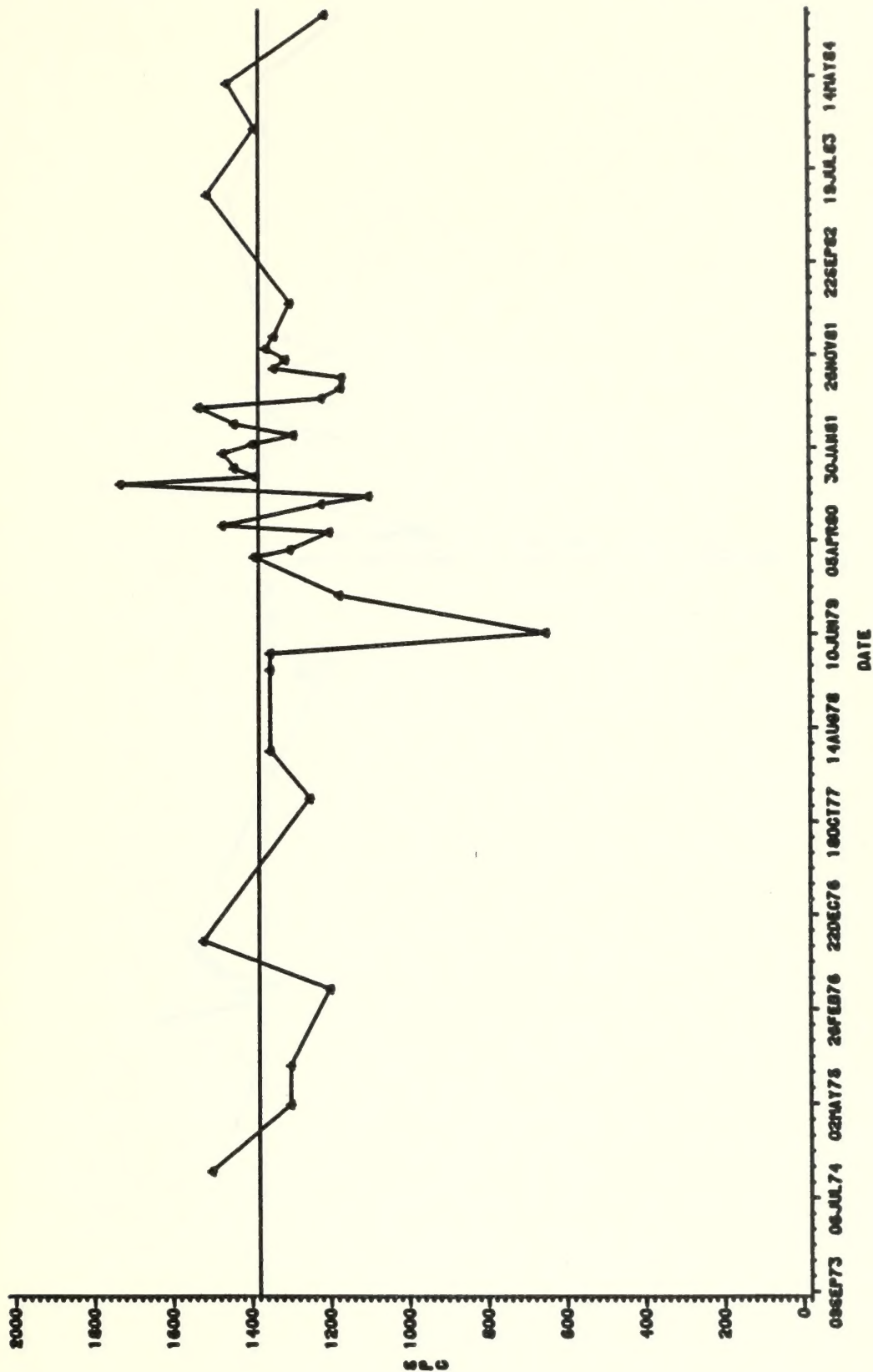
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---- (BASELINE MEAN 1360 UMHOS)

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-MA05



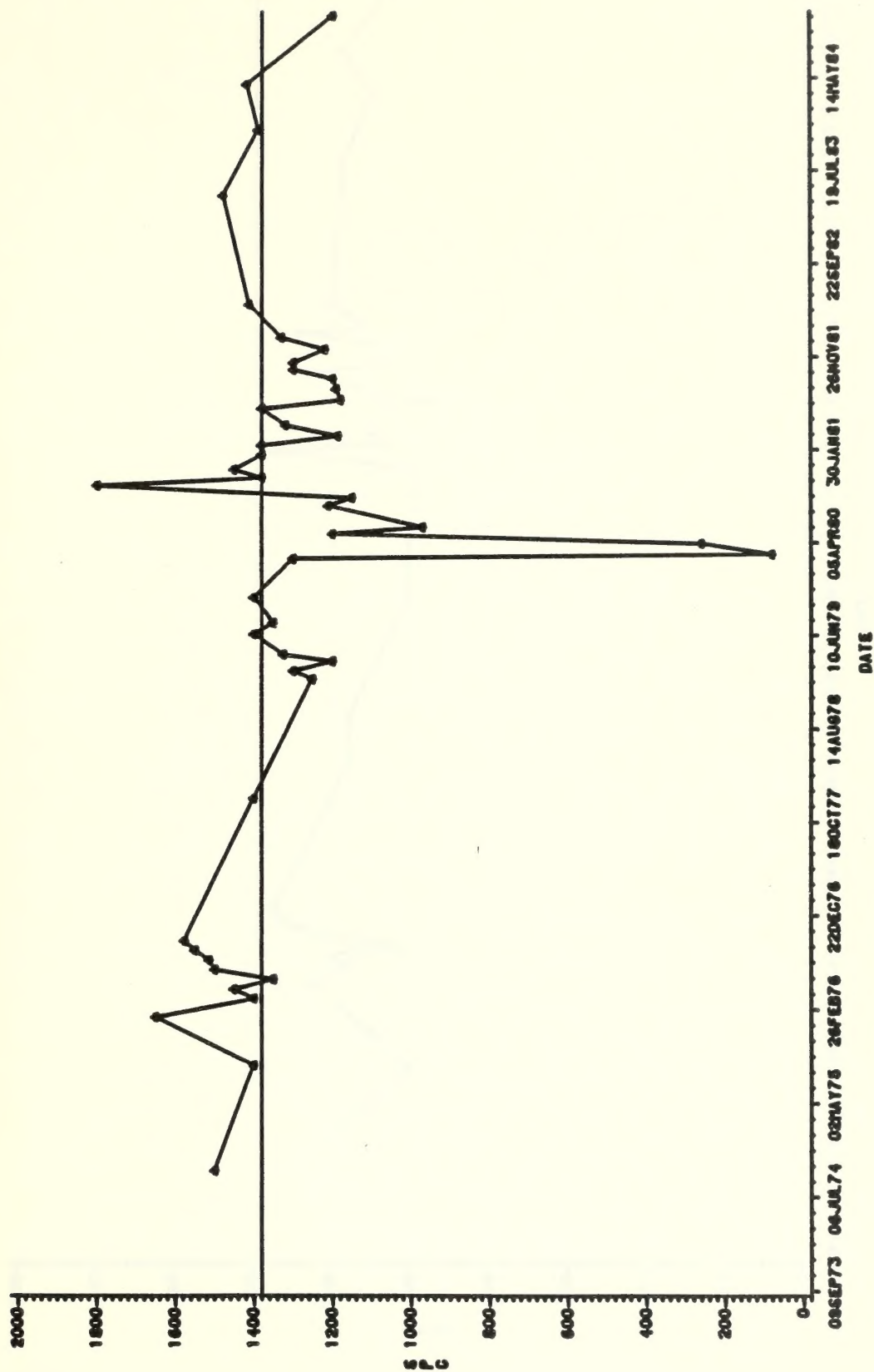
--- (BASELINE MEAN 1380 UMHOS)

1911



RECEIVED THE UNIVERSITY OF CHICAGO LIBRARY

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-UMOS



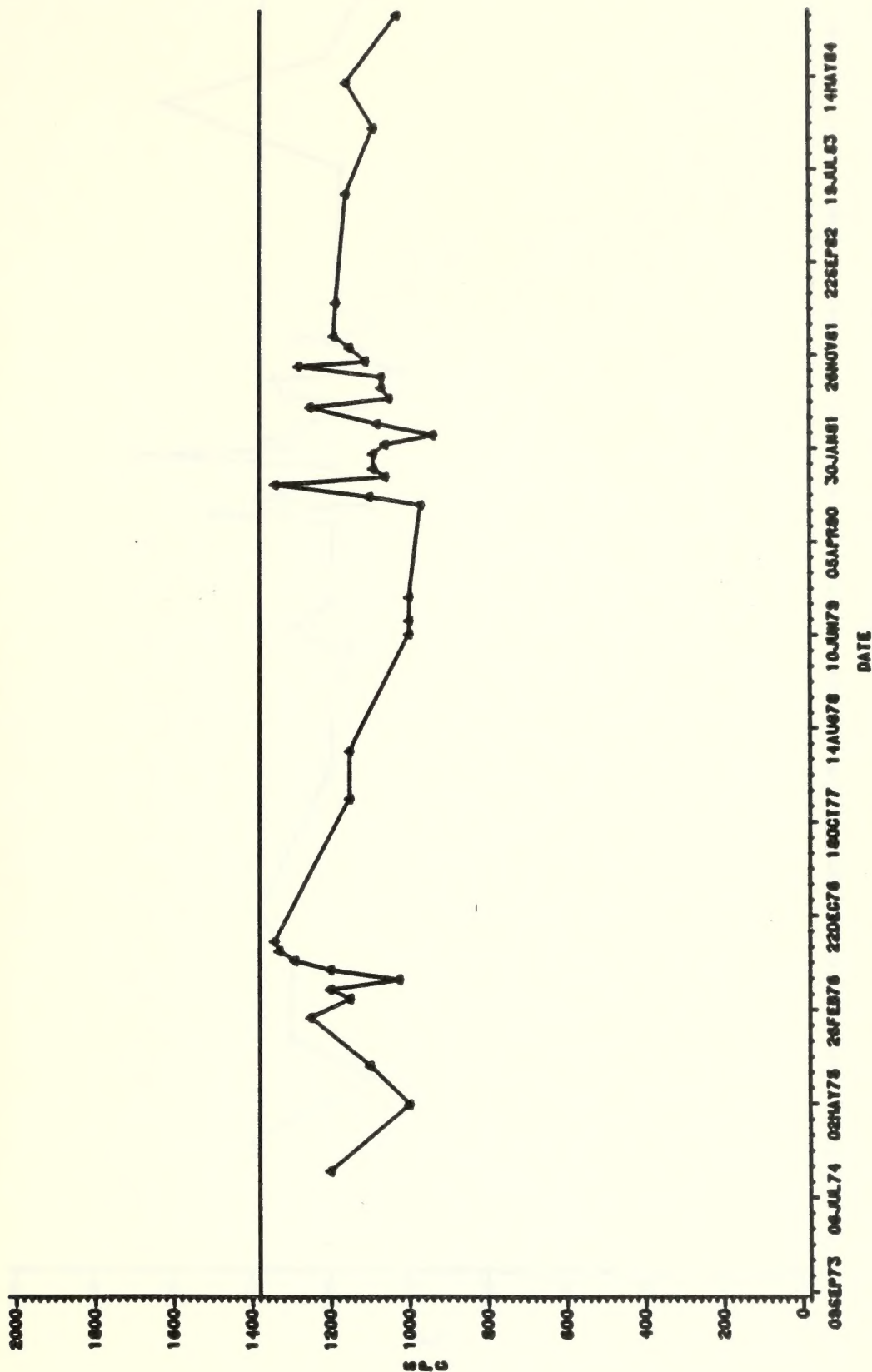
--- (BASELINE MEAN 1300 UMHOS)



Fig. 1. Variation of refractive index with wavelength for a series of vitreous salts.

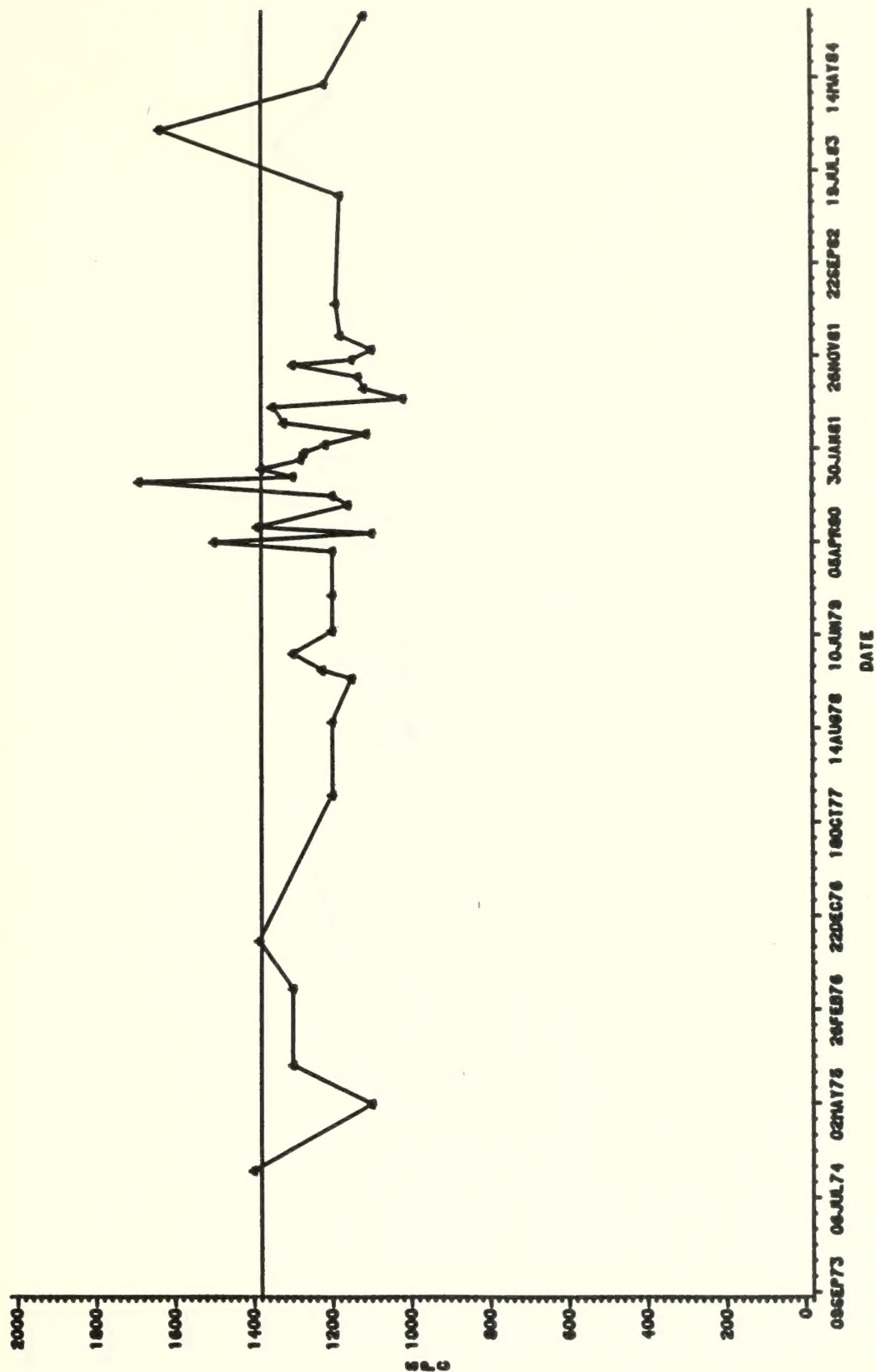
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-NA07



---- (BASELINE MEAN 1300 UMHOS)

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-MA08



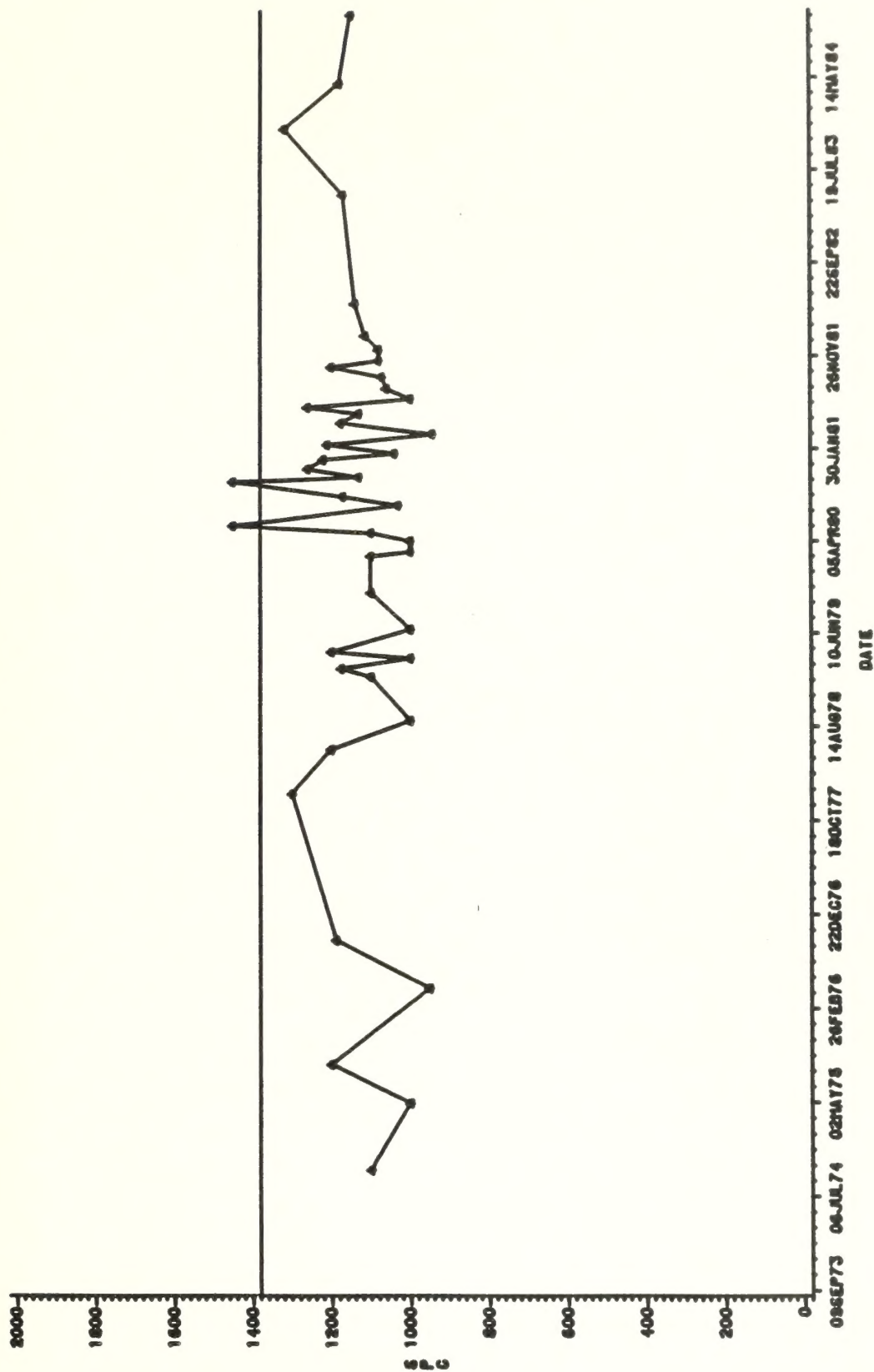
--- (BASELINE MEAN 1300 UMHOS)

1942



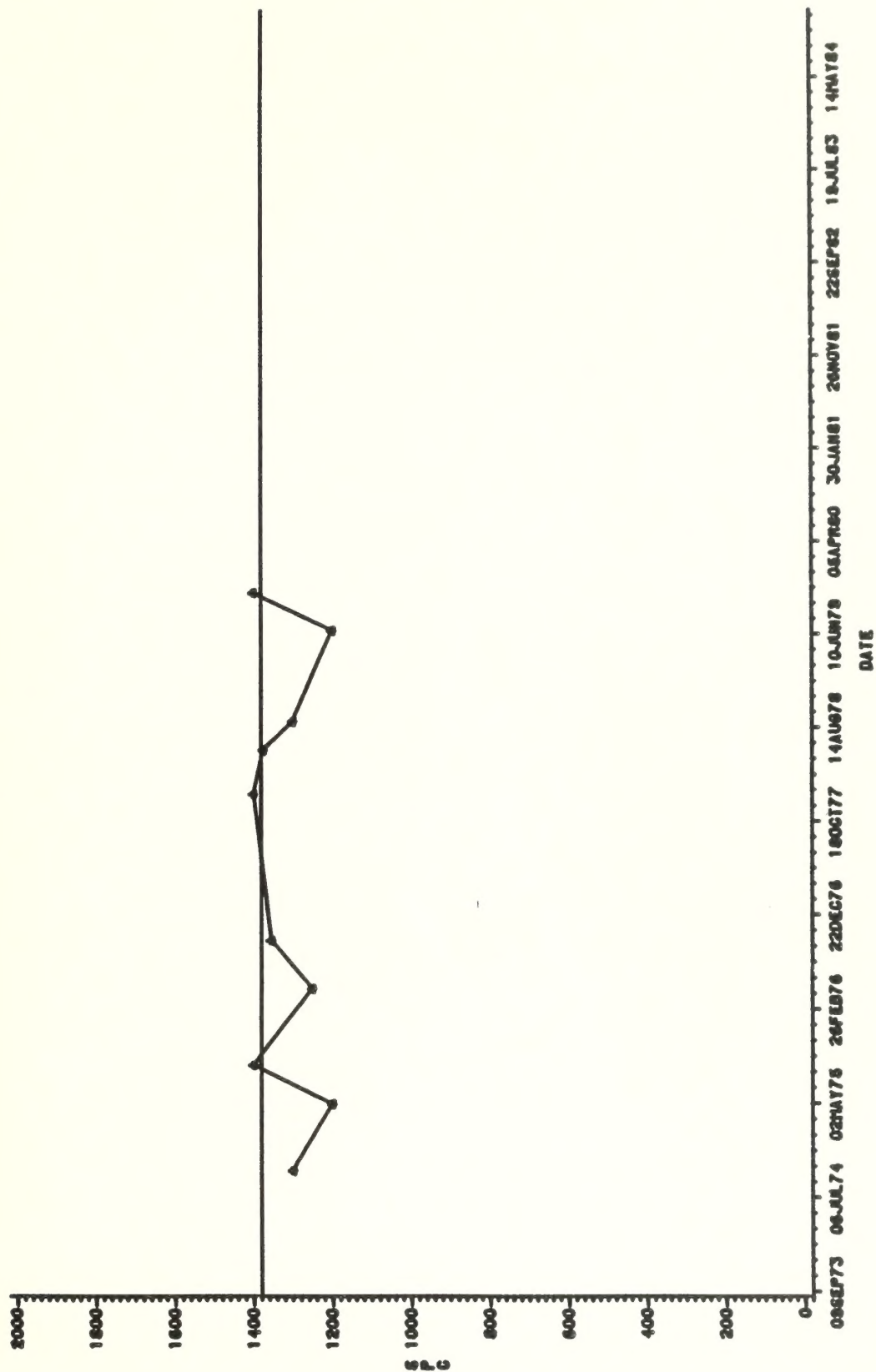
АВТО МБС (ОМБС) ДВА СЕРИИ ОД УТИВАЈУТ БЕЛТ АУЛЕБА

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOG-UMOS



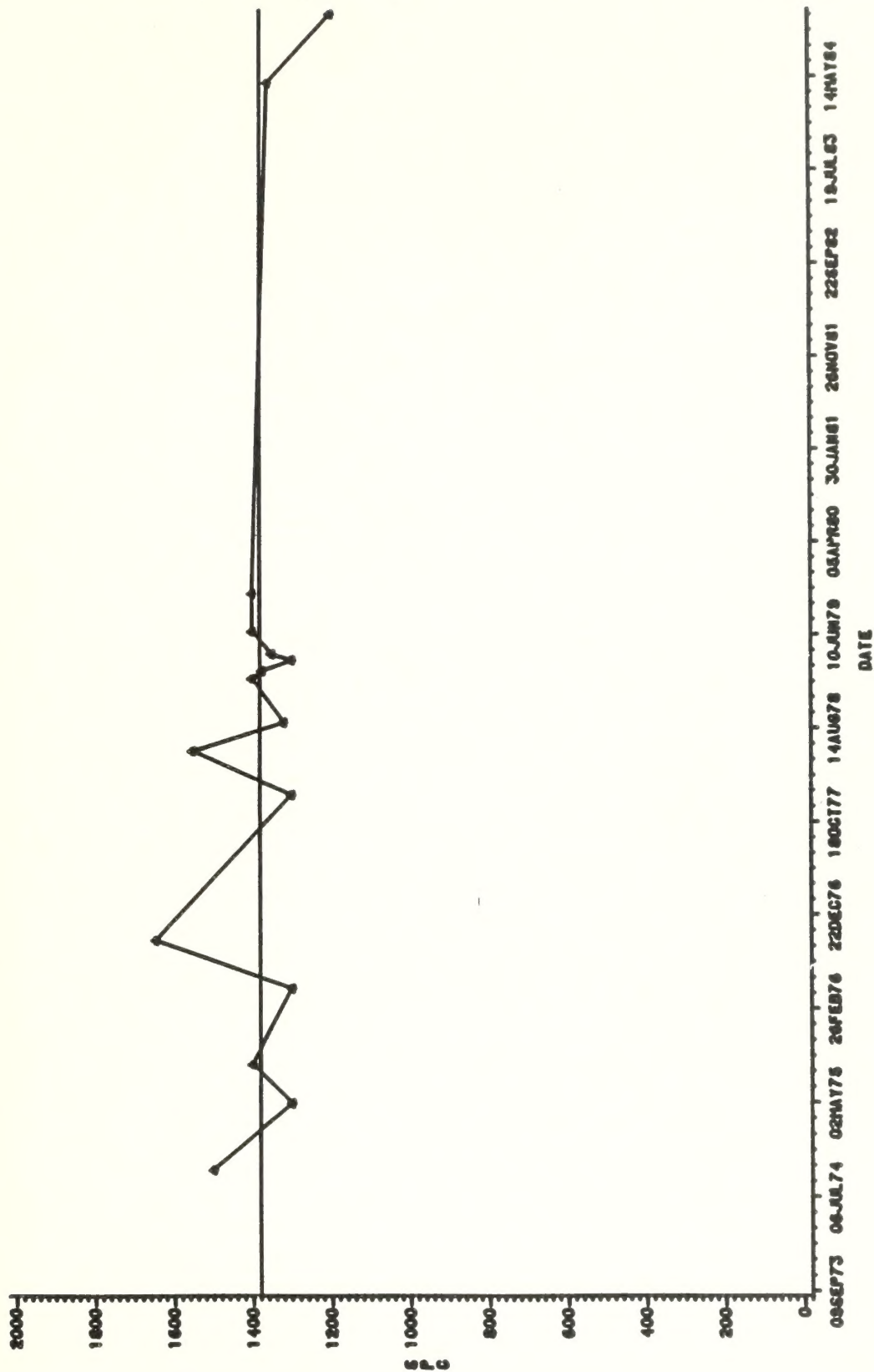
--- (BASELINE MEAN 1360 UMHOS)

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOC=U110



---- (BASELINE MEAN 1360 UMHOS)

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOC=MA11



--- BASELINE MEAN 1360 UPHOS

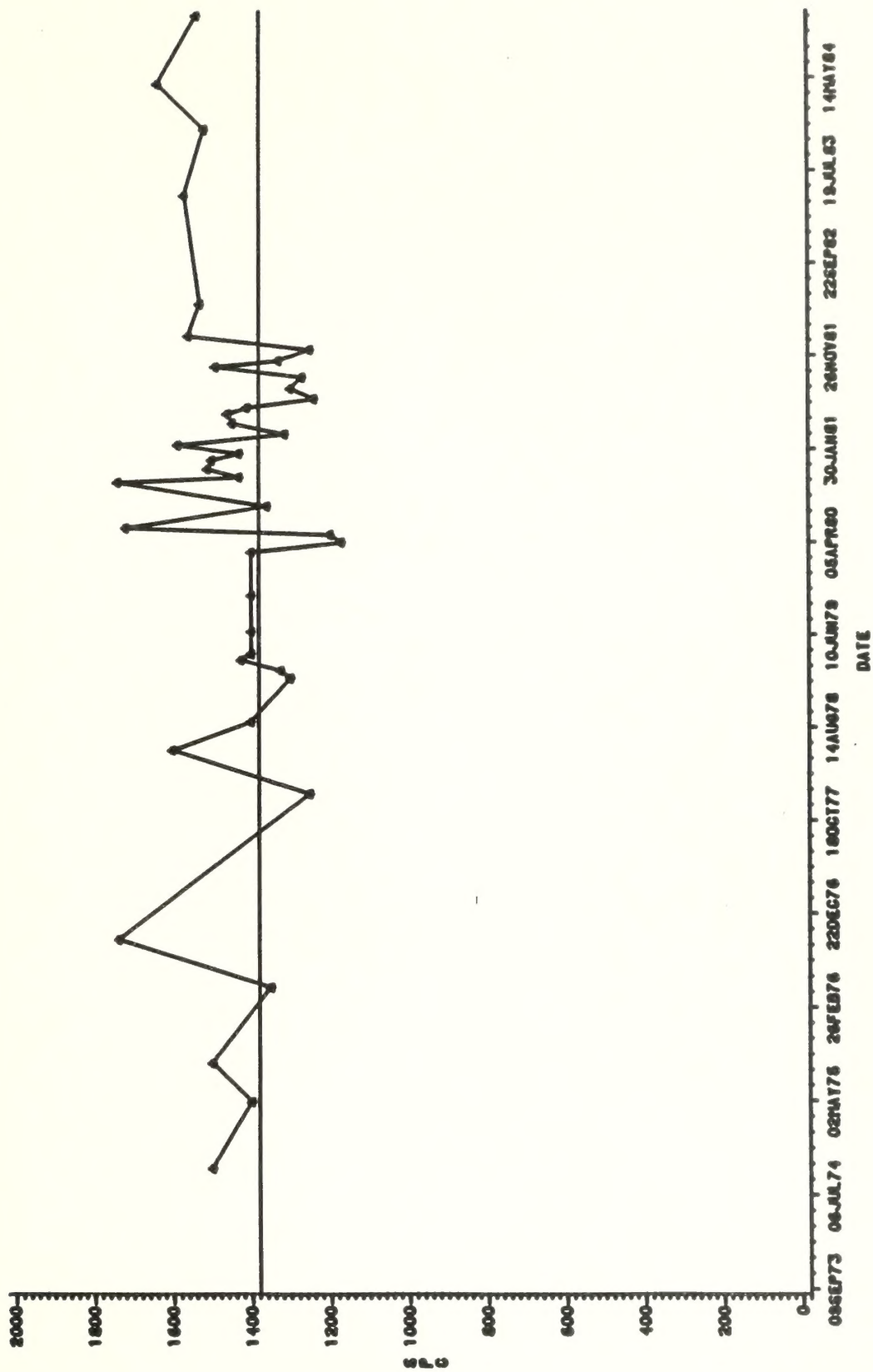
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1012



ESTIMATED 25% (0.00002) LINE SLOPE OF VERTICAL AXIS

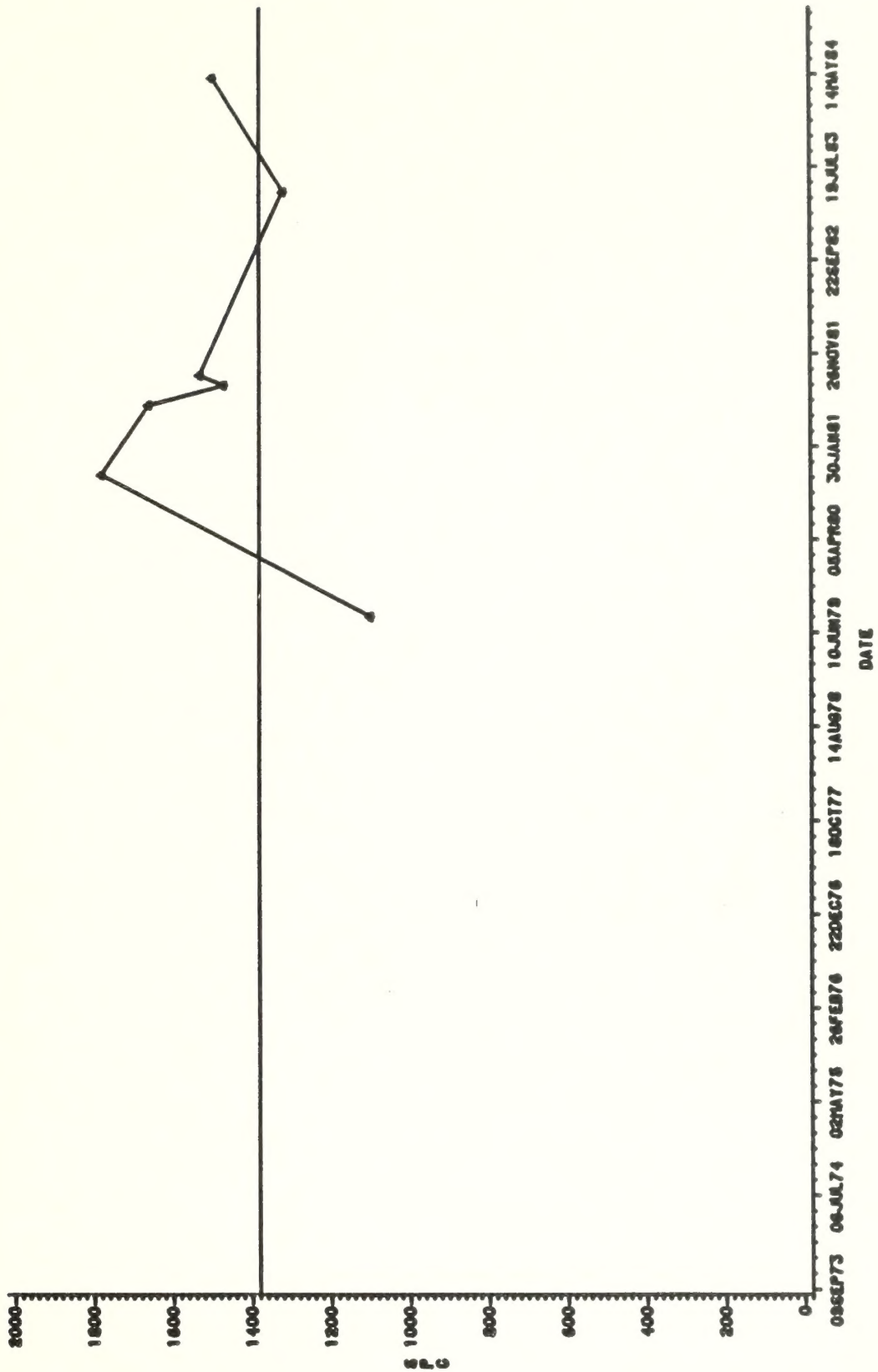
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-HA12



--- (BASELINE MEAN 1360 UMHOS)

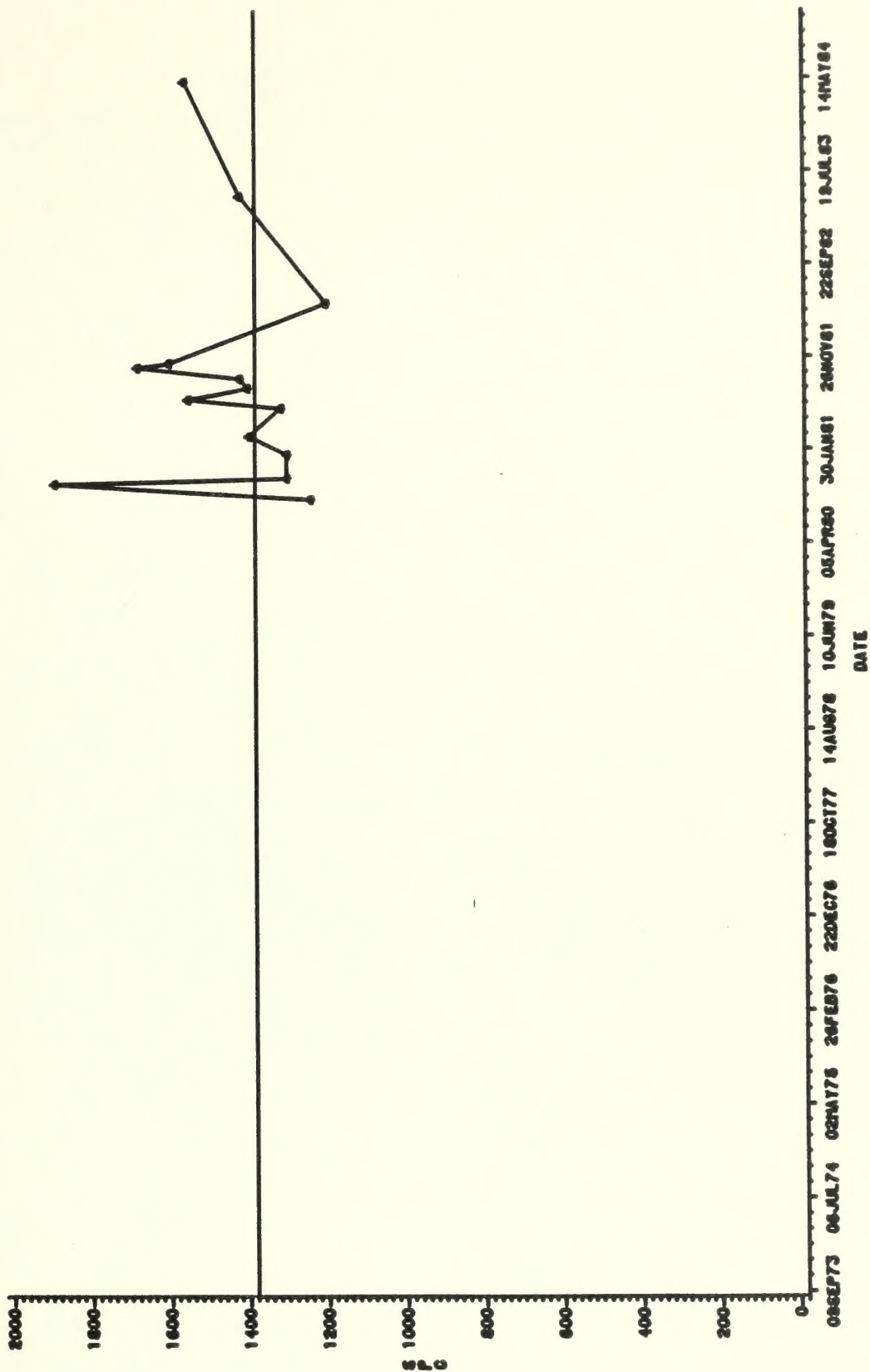
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC-MASS



---- (BASELINE MEAN 1360 UMHOS)

FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS LOC-MASS



---- (BASELINE MEAN 1360 UMHOS)

BEDROCK
WELLS

1.2.2.4 Bedrock Wells

During the Interim Monitoring Program water quality samples are taken quarterly or semiannually, depending on the well, for the following parameters.

TABLE 1.2.2.4-1

Parameters Analyzed During IMP

Field Measurements: pH, temperature, dissolved oxygen, conductivity.

As	Pb	K	Ba
Mo	Ca	HCO ₃	CO ₃
Cr	Cl	Mg	SO ₄
Cu	Li	Fluoride	TDS
Fe	Al	B	Oil and Grease
Hg	Sr	BOC	SiO ₂
Mn	Se	Phenols	Cn
Radiology	Zn	Ammonia	Total phosphate
Na	COD	Hardness	
Br	Alkalinity	NO ₃	

Field measurements of pH, temperature and specific conductance were taken at six wells in June or July 1984. See Table 1.2.2.4-2.

Samples were taken in June, July and September 1984 at eight wells. Refer to Tables 1.2.2.4-3 through 1.2.2.4-6 of lab analysis results from UPC1, UPC2, LPC3, LPC4 and lower aquifer bedrock wells.

Section 1

The first part of the report is devoted to a general description of the project and its objectives. It also includes a brief overview of the methodology used in the study.

Section 2

The second part of the report presents the results of the study. It is divided into two main sections: the first section discusses the findings of the survey, and the second section discusses the findings of the interviews.

The third part of the report discusses the implications of the findings and provides recommendations for future research. It also includes a conclusion and a list of references.

1	2	3	4
10	20	30	40
50	60	70	80
90	100	110	120
130	140	150	160
170	180	190	200
210	220	230	240
250	260	270	280
290	300	310	320
330	340	350	360
370	380	390	400
410	420	430	440
450	460	470	480
490	500	510	520
530	540	550	560
570	580	590	600
610	620	630	640
650	660	670	680
690	700	710	720
730	740	750	760
770	780	790	800
810	820	830	840
850	860	870	880
890	900	910	920
930	940	950	960
970	980	990	1000

The fourth part of the report discusses the limitations of the study and provides suggestions for future research. It also includes a list of references.

The fifth part of the report is a conclusion and a list of references. It summarizes the findings of the study and provides recommendations for future research.

TABLE 1.2.2.4-2

CB-TRACT
FIELD MEASUREMENTS
BEDROCK MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	FIELD FLUORIDE (MG/L)
----	--	--	--	-----	-----	-----	-----
WD12	84	6	12				
			25	8.5	13.0	1140.0	
			7 30				
			8 31				
			9 27				
			10 29				
			11 29				
WD20	84	6	18				
			7 2				
			23				
			8 31				
			9 26				
			10 29				
			11 30				
WD57	84	6	25	7.8	14.0	1110.0	
			8 29				
			10 30				
WD90	84	6	18				
			28	7.1	13.0	2280.0	
			7 31				
			8 30				
			9 17	7.3	11.0	2220.0	
			10 25				
			11 30				
WE20	84	6	18				
			7 2	8.9	14.0	2680.0	
			23				
			8 31				
			9 26				
			10 29				
			11 30				
WG12	84	6	12				
			25	8.5	14.0	4280.0	
			7 30				
			8 31				
			9 27				
			10 29				
			11 29				
WG20	84	6	18				

TABLE 1.2.2.4-2 (Cont'd)
 CB-TRACT
 FIELD MEASUREMENTS
 BEDROCK MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	FIELD FLUORIDE (MG/L)
----	--	--	--	-----	-----	-----	-----
4G20	84	7	2	9.2	14.0	2660.0	
			23				
		8	31				
		9	26				
		10	29				
		11	30				

TABLE 1.2.2.4-3

CR-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPCI BEDRUCK WELLS

WELL	YR	MO	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WD12	H4	6	-1.00	-10.0	-.0100	.2	.10	620.0	6.4	170.0	7.0	-50.0	-.020	-.020
WD20	H4	7	-1.00	-10.0	.0020	.8	.30	810.0	.6	25.0	6.0	40.0	-.005	-.005
WD57	H4	6				.9			9.4					

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-3 (Cont'd)

CB-TRACI
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPCI PEDROCK WELLS

WELL	YR	MO	SI02 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WD12	84	6	11.0		.01	.10	.00020	-.010		.010	-.020	-.05	.024	.03	2.70
WD20	84	7	2.1		.05	2.00	.00010	-.005		.005	-.005	-.05	.012	.02	12.00
WD57	84	6								.041		.08	.009		

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-3 (Cont'd)

CR-TRACT
QUARTER AND SEMI-ANNUAL WATER QUALITY ANALYSES
UPCI BEDROCK WELLS

WELL	YR	MO	TOTAL ALK		AMMONIA		AS	HA	HCO ₃		CO ₃	BH	HARDNESS		NA	MG	CA
			(MG/L)	AL	(MG/L)	AS N	(MG/L)	(MG/L)	(MG/L)	CAC03	(MG/L)	CAC03	(MG/L)	CAC03	(MG/L)	(MG/L)	(MG/L)
W012	R4	6	440.0	-0.100	-0.040	-0.005	-0.50	430.0	10.0	220.0	190.0	44.0	12.0				
W020	R4	7	690.0	-0.500	0.600	-0.005	0.30	660.0	30.0	23.0	340.0	3.3	3.4				
W057	R4	6				0.007			280.0	280.0	170.0	48.0	30.0				

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-4

C9-TRACI
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC2 BEDROCK WELLS

WELL	YR	MO	NO3		OIL AND GREASE		PHENOLS	K	H	TOTAL DISS		SH	SO4	CL	COB	CR	CU
			(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
WE20	84	7	.014	-1.00	-10.0	.0020	3.0	1.30	1700.0	.6	65.0	34.0	20.0	-	-	-	-

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-4 (Cont'd)

CR-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC2 BEDROCK WELLS

WELL	YR	MO	SI02 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PH (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WE20	84	7	5.4		.50	6.00	-.00010	-.005		-.005	-.005	.17	.006	.12	31.00

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-4 (Cont'd)

CH-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC2 BEDROCK WELLS

WELL	YR	MO	7	TOTAL		ALK		AMMONIA		AS		AL		AS		NA		HARDNESS		MG		CA	
				(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
WE20	R4			1400.0	-500	1.600	-0.005	.50	1300.0	100.0	1.700	23.0	730.0	2.1	.4								

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-5

CH-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LPC3 AND LPC4 BEDROCK WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)		PHENOLS (MG/L)	K (MG/L)	H (MG/L)	TOTAL DISS SOLIDS (MG/L)		SP (MG/L)	SO4 (MG/L)	CL (MG/L)	CUD (MG/L)	CR (MG/L)	CU (MG/L)
W612	84	6	.050	-1.00	-10.0	-0.0100	5.2	6.30	2700.0	1.0	30.0	130.0	-50.0	-0.020	-0.005		
W620	84	7	.017		-0.0020	2.3			.3								

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-5 (Cont'd)

CH-TRACT QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES LPC3 AND LPC4 BED-ROCK WELLS															
			SI02	CN	TOTAL	N	HG	SE	AG	ZN	PB	LI	MN	FE	F
WELL	YR	MO	(MG/L)	(MG/L)	(MG/L)	KJELD. (MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
WG12	84	6	14.0		.07	-.10	-.00020	-.010		.042	-.020	.44	.009	.06	27.00
WG20	84	7				13.00	-.00010	-.005		.013	-.005	.14	-.005	.04	

NOTE: - INDICATES LESS THAN

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WASHINGTON, D. C.

1917

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NAME	ADDRESS	CITY	STATE	COUNTY	ZIP
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TABLE 1.2.2.4-5 (Cont'd)

CH-THACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LPC3 AND LPC4 BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L)		AMMONIA		AS (MG/L)	HA (MG/L)	HCO ₃ (MG/L)	CO ₃ (MG/L)	HR (MG/L)	HARDNESS		NA (MG/L)	MG (MG/L)	CA (MG/L)
			CA	MG	CAC03	CAC03										
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
W612	84	6	2200.0	-0.100	-0.040	-0.005	-0.50	2100.0	60.0	5.700	24.0	1200.0	4.4	1.2		
W620	84	7		-0.500		-0.005	.20		7.0		7.0	730.0	1.5	.3		

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-6

CH-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	CU/D (MG/L)	CR (MG/L)	CU (MG/L)
WY45	H4	9	.83	-10.0	.0020	.9	.20	1200.0	14.0	520.0	8.0	26.0	.006	.005
WY81	H4	6	-1.00	-10.0	-.0100	1.7	1.40	1100.0	.8	52.0	8.0	-50.0	-.020	-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-6 (Cont'd)

CH-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	ST02 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WY45	84	9	27.0	-.005	.01	2.00	-.00010	-.005	-.005	-.005	-.005	-.05	.110	.15	.40
WY81	84	6	9.1		.20	-.10	-.00020	-.010		-.020	-.020	.10	.020	-.02	21.00

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-6 (Cont'd)

CR-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HC03 (MG/L)	CO3 (MG/L)	RR (MG/L)	HARDNESS (MG/L)	NA (MG/L)	MG (MG/L)	CA (MG/L)
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WY45	84	9	350.0	-500	.200	-0.005	-0.20	340.0	2.0	.200	520.0	200.0	71.0	96.0
WY81	84	6	990.0	-0.100	.090	-0.020	-0.50	970.0	15.0	.450	11.0	540.0	2.6	.5

NOTE: - INDICATES LESS THAN

UNIT 1: THE HISTORY OF THE UNITED STATES

UNIT 1: THE HISTORY OF THE UNITED STATES	UNIT 2: THE HISTORY OF THE UNITED STATES	UNIT 3: THE HISTORY OF THE UNITED STATES	UNIT 4: THE HISTORY OF THE UNITED STATES	UNIT 5: THE HISTORY OF THE UNITED STATES	UNIT 6: THE HISTORY OF THE UNITED STATES	UNIT 7: THE HISTORY OF THE UNITED STATES	UNIT 8: THE HISTORY OF THE UNITED STATES	UNIT 9: THE HISTORY OF THE UNITED STATES	UNIT 10: THE HISTORY OF THE UNITED STATES
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UNIT 1: THE HISTORY OF THE UNITED STATES	UNIT 2: THE HISTORY OF THE UNITED STATES	UNIT 3: THE HISTORY OF THE UNITED STATES	UNIT 4: THE HISTORY OF THE UNITED STATES	UNIT 5: THE HISTORY OF THE UNITED STATES	UNIT 6: THE HISTORY OF THE UNITED STATES	UNIT 7: THE HISTORY OF THE UNITED STATES	UNIT 8: THE HISTORY OF THE UNITED STATES	UNIT 9: THE HISTORY OF THE UNITED STATES	UNIT 10: THE HISTORY OF THE UNITED STATES

UNIT 1: THE HISTORY OF THE UNITED STATES

UNIT 2: THE HISTORY OF THE UNITED STATES

**IMPOUNDMENTS/
LAND APPLICATION/
REINJECTION/DISCHARGE**

1.2.2.5 Impoundments/Land Application/Reinjection/ Discharge

Data reported in this section comply with NPDES permit changes during this report period. Effective October 1, 1983 the NPDES permit was renewed. Changes were made regarding sampling and reporting requirements.

Water samples were taken at A/B discharge point (WN40) on weekly intervals during June through November 1984. Data tables of these samples are reported in Table 1.2.2.5-1.

Table 1.2.2.5-2 presents a semi-annual sample taken in July 1984. Included in this table are thiocyanate analyses which are currently in the NPDES sample parameter suite. This parameter is not a permit requirement and is only being analyzed to establish a baseline.

As noted in the regular monthly reports to the State Department of Health (APCD), the high values of mercury are apparently attributable to a broken mercury thermometer in the field lab.

1. The first part of the report is a general introduction to the subject of the study.

2. The second part of the report is a detailed description of the methods used in the study.

3. The third part of the report is a discussion of the results of the study.

4. The fourth part of the report is a conclusion and a list of references.

5. The fifth part of the report is a list of appendices.

CR-TRACT
NPDES WATER QUALITY SAMPLES
WEEKLY ANALYSIS
TABLE 1.2.2.5-1

LOC	YR	MO	DAY	LAR TOTAL SOLIDS (MG/L)	TOTAL DISSOLVED SOLIDS (MG/L)	TOTAL F (MG/L)	TOTAL B (MG/L)	AMMONIA AS N (MG/L)	AL (MG/L)	TOTAL FE (MG/L)	OIL AND GREASE (MG/L)	TOTAL CD (MG/L)	TOTAL CU (MG/L)	TOTAL HG (MG/L)	TOTAL AG (MG/L)
WN40	84	6	7	44.0	1900.0	19.00	.60	-.04	-.1	-.10	-10	-.01	-.02	-.00020	-.01
		13	13	-10.0	1400.0	20.00	.70	-.04	-.1	.05	-10	-.01	-.02	-.00020	-.01
		20	20	-10.0	1400.0	23.00	.70	-.04	-.1	.04	-10	-.01	.07	-.00020	-.01
		27	27	-10.0	1400.0	22.00	.60	-.04	-.1	.05	-10	-.01	.04	-.00020	-.01
	7	2	2	-10.0	1400.0	24.00	.70	-.10	-.5	-.01	-10	.01		-.00010	-.01
	10	10	10	-10.0	1400.0	23.00	.60	.10	-.5	.08	-10	.01		.00010	
		11	11				.06			.06			.01	.00020	
		17	17	-10.0	1400.0	22.00	.60	-.10	-.5	.06	-10	.01		.00010	
		24	24	-10.0	1400.0	22.00	.60	.10			-10			.00010	
	8	1	1	-10.0	1400.0	22.00	.80	.10	-.5	.06	-10	.01		.00020	
		9	9	-10.0	1400.0	21.00	.80	-.10	-.5	.20	-10		.01	-.00010	
		15	15	-10.0	1400.0	20.00	.70	-.10	-.5	.10	-10		.01	-.00010	
		21	21	-10.0	1400.0	18.80	.70	-.10	-.5	.34	-10		.01	-.00010	
		29	29	-10.0	1300.0	19.40	.80	-.10	-.5	.06	-10		.01	.00020	
	9	5	5	-10.0	1400.0	21.00	.70	-.10	-.5	.04	-10			-.00010	
		12	12	-10.0	1400.0	20.00	.70	-.10	-.5	.05	-10			-.00500	
		20	20	-10.0	1400.0	21.00	.80	-.10	.7	.08	-10			-.00010	
		26	26	-10.0	1400.0	21.00	.80	-.10		.05	-10			.00020	
	10	3	3	-10.0	1400.0	21.00	.60	-.10	-.5	.16	-10	.01		-.00010	
		10	10	-10.0	1400.0	21.00	.70	-.10	-.5	.06	-10		.01	-.00010	
		17	17	-10.0	1400.0	22.00	.70	-.10	-.5	.22	-10		.01	.00010	
		24	24	-10.0	1400.0	22.00	.60	-.10	-.5	.07	-10	.03	.01	.00020	
		31	31	-10.0	1400.0	22.00	.65	-.10	-.5	.04	-10	.01	.01	.00040	
	11	7	7	-10.0	1400.0	22.00	.70	-.10	-.5	.06	-10	.01	.01	.00020	
		23	23	7.0	1400.0	21.00	.70	-.10	-.5	.06	2	.01	.01	-.00005	
		28	28	-5.0	1300.0	21.00	.70	-.10	-.5	.06	2	.04	.01	-.00005	
WN51	84	8	1	1000.0	140.0	.40	-.10	-.10	-.5	48.00	-10	.01	.04	.00010	.01
WN53	84	8	16	1800.0	320.0	.50	-.10	-.10	-.5	80.00	-10	.01	.07	.00010	.01
WN55	84	8	1	2100.0	110.0	.50	-.10	-.10	-.5	88.00	-10	.01	.08	-.00010	.01
WP61	84	8	16	2000.0	120.0	.40	-.10	-.10	-.5	95.00	-10	.01	.07	.00010	

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-2

NPDES SEMI ANNUAL SAMPLE
WATER QUALITY (PCI/L)

LOC	YR	MO	TOTAL		TOTAL	TOTAL	COD	THIOCYANATE
			ALPHA	BETA	RADIUM 226			
WN40	84	7	1.0	-2.0	.6		30.0	
		8						-1.00
								-1.00
								-1.00
								-1.00
		9						-1.00
								-1.00
								-1.00
		10						-1.00
								-1.00
								-1.00
								-1.00
		11						-1.00
								.50
								.50

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-2 (Cont'd)

NPDES SEMI ANNUAL SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL DISSOLVED SOLIDS	FLUORIDE	BORON	AMMONIA AS N	PHENOL	OIL AND GREASE	KJELDAHL	CYANIDE	SELENIUM	SUSPENDED SOLIDS	DOC
WN40	84	7	1400.0	24.00	.90	-.100	-.0020	-10.0		-.005	-.005	-10.0	4.0
		8											

9

11
414

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NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-2 (Cont'd)

NPDES SEMI ANNUAL SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL ALKALINITY	BROMIDE	CARBONATE	CALCIUM	NITRATE	SULFATE	MAGNESIUM	BICARBONATE	SILICA
WN40	84	7	1200.0	-.050	100.0		-1.00	30.0	5.0	1100.0	12.0
		8									

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NOTE: - INDICATES LESS THAN

SHAFT AND
MINE WATER

1.2.2.6 Shaft and Mine Water

No samples were collected in shafts during this report period, June through November 1984.

SHALE DUMPS

1.2.2.7 Shale Dumps

Collection of precipitation leaching through the raw and spent shale piles is currently being analyzed by CB personnel. These analyses were run by Colorado State University staff, with EPA funding the program. Funding has since been discontinued in 1984 with CB continuing the program. Lab analyses are reported in Table 1.2.2.7-1.

Station locations are shown in Section 1.2.1.7 on Figure 1.2.1.7-1.

TABLE 1.2.2.7-1

CB-THACT
RAW AND SPENT SHALE PILES

LOC	YR	MO	DY	OIL AND GREASE		PHEN (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS		SH (MG/L)	SO ₄ (MG/L)	CL (MG/L)	COD (MG/L)	CH (MG/L)	CU (MG/L)
				MO (MG/L)	NO ₃ (MG/L)				SOLIDS (MG/L)	CHLORIDE (MG/L)						
WR00	84	6	7	.100	8.90	-.0100	110.0	2.00	21000.0	3.2	9000.0	340.0			.030	.500
			11	.100	16.00	-.0100	100.0	2.10	6900.0	2.3	9000.0	180.0			.020	.050
WR10	84	6	7	.090	11.00		4.5	-.10	4100.0	3.9	2500.0	7.0				-.020
			11	.090	7.80		4.9	.10	5100.0	3.8	3100.0	8.0				-.020
WR15	84	6	7	.090	7.20		3.4	-.10	4200.0	4.0	2500.0	8.0				-.020
			11	.090	5.60		4.1	.10	5100.0	4.1	3200.0	6.0				-.020
WR20	84	6	7	.090	12.00		6.4	.10	2400.0	4.2	1400.0	5.0				-.020
			11	.090	24.00		8.2	.30	4500.0	4.1	2900.0	4.0				-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.7-1 (Cont'd)

CB-THACT
RAW AND SPENT SHALE PILES

LOC	YR	MO	DAY	SiO ₂ (MG/L)	TOTAL CN (MG/L)	PHOSPHATE (MG/L)	N (MG/L)	KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WR00	84	6	7	.1					-.00020	.100	.020	.100	-.020	.10	.050	.10	4.90
			11	2.8					-.00020	.100	.020	.100	-.020	.10	.020	.07	3.40
WR10	84	6	7	.2								.100			-.020	.02	4.00
			11	.2								.100			.020	.02	5.80
WR15	84	6	7	.2								.100			.020	.02	7.70
			11	.2								.100			.020	.03	6.70
WR20	84	6	7	.1								.020			.020	.02	3.60
			11	4.7								.100			.020	.02	3.60

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.7-1 (Cont'd)

CB-TRACT																				
RAW AND SPENT SHALE PILES																				
				TOTAL	ALK		AMMONIA		AS		BA	HC03		CO3	HARDNESS		NA	MG	CA	
LOC	YR	MO	DAY	(MG/L)	CAC03	AL	AS N	AS	(MG/L)	(MG/L)	(MG/L)	CAC03	CAC03	(MG/L)	CAC03	BR	(MG/L)	(MG/L)	(MG/L)	(MG/L)
WR00	84	6	7	790.0		-.100	-.040	.060	1.90	740.0	-1.0							7100.0	470.0	190.0
			11	750.0		-.100	.080	-.020	1.10	730.0	12.0						120.0	5000.0	460.0	
WR10	84	6	7	95.0		-.100				92.0	3.0							450.0	110.0	230.0
			11	110.0		-.100				100.0	10.0							630.0	290.0	360.0
WR15	84	6	7	94.0		-.100				91.0	3.0							410.0	300.0	400.0
			11	110.0		-.100				100.0	10.0							460.0	350.0	360.0
WR20	84	6	7	88.0		-.100				85.0	3.0							310.0	99.0	120.0
			11	94.0		-.100				91.0	3.0						280.0	620.0	250.0	

NOTE: - INDICATES LESS THAN

1.2.2.8 Supplemental Water Data - Water Quality

This section contains cyanide results of water samples taken at bedrock wells WD20, WX44 and WY45 not previously reported. Data tables of these samples are reported in Table 1.2.2.8-1.

TABLE 1.2.2.8-1

C-R TRACT BEDROCK WELL WATER QUALITY RESULTS
WATER QUALITY (MG/L)

LOC	YR	MO	DAY	CYANIDE
WD20	82	12	14	-.005
WX44	82	12	13	-.005
WY45	82	12	13	-.005

NOTE: - INDICATES LESS THAN

